



National Institute
of Mental Health

**ACTIVE
TRAINING & EDUCATION GRANTS**

FISCAL YEAR 1998

Henry Khachaturian, Ph.D.
Training Director

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NIMH ACTIVE TRAINING & EDUCATION GRANTS FISCAL YEAR 1998

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Dodge, Kenneth	Vanderbilt University	Life-span Development of Normal & Abnormal Behavior	DMDBA
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Eaton, William	Johns Hopkins University	Psychiatric Epidemiology Training Program	DSIR
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Finlay, Barbara	Cornell University	Multidisciplinary Training in Developmental Psychology	DMDBA
Fischbach, Gerald	Harvard University	Research Training in Neuroscience	DBCNR
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Flavell, John	Stanford University	Training in Developmental Psychology	DMDBA
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Francis, Aracelis	Council on Social Work Education	Social Work Research Fellowship Program	DSIR/AIDS
Fritz, Gregory	Rhode Island Hospital	Research Training in Child Mental Health	DMDBA
Gallistel, C R	University of California, Los Angeles	Training in Physiological Psychology	DBCNR
Garrity, Thomas	University of Kentucky	Research Training in Medical Behavioral Science	DMDBA
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Gelman, Rochel	University of California, Los Angeles	Training in Developmental Cognitive Science	DMDBA
Gershenson, Celia	University of Minnesota, Twin Cities	Short Term Minority Undergraduate NIMH Areas Research	
Gilmore, John	University of North Carolina, Chapel Hill	Fellowship: Clinical Psychobiology and Pharmacology	
Glaser, Ronald	Ohio State University	Training Program in Psychoneuroimmunology	AIDS
Golden, Robert	University of North Carolina, Chapel Hill	Fellowship: Clinical Psychobiology and Pharmacology	DSIR
Greenblatt, David	Tufts University, Boston	Training in Geriatric Psychopharmacology	DBCNR
Grodzicker, Terri	Cold Spring Harbor Laboratory	Neurobiology Short Term Training	DBCNR
Grusky, Oscar	University of California, Los Angeles	Research Training on Service Systems for Persons/c Aids	AIDS
Guarnaccia, Peter	Rutgers State University	Minority Undergraduate MH Research Training	
Gur, Raquel	University of Pennsylvania	Schizophrenia: A Neuropsychiatric Perspective	DBCNR
Hall, Edward	Talladega College	Talladega College COR Undergraduate Honors Project	OSP

Harkins, Stephen	Northeastern University	Training Basic Researchers, with Emphasis on Minorities	
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Herd, Gilbert	University of Chicago	Culture and Mental Health Behavior Training Program	DMDBA
Hewitt, John	University of Colorado at Boulder	Methodology of Twin Studies	
Hofer, Myron	Columbia University New York	Research Training – Psychobiological Sciences	DBCNR
Holland, Jimmie	Sloan-Kettering Institute	Psychiatric and Psychological Research Training in Aids	AIDS
Hopkins, Carl	Cornell University	An Integrative Approach to Neurobiology & Behavior	DBCNR
Horowitz, Leonard	Stanford University	Training in Personality and Emotion	DMDBA
Horwitz, Sarah	Yale University	Training in Mental Health Service Systems Research	DSIR/AIDS
Hulley, Stephan	University of California, San Francisco	Traineeships in AIDS Prevention Studies	AIDS
Hyde, James	Training in Functional Neuroimaging	Medical College of Wisconsin	DBCNR
Iacono, William	University of Minnesota	Neurobehavioral Aspects of Personality & Psychopathology	DMDBA
Irwin, Michael	University of California, San Diego	Fellowship: Clinical Psychopharmacology & Psychobiology	DBCNR
Jackson, James	University of Michigan	Social Psychology	DMDBA
Jeste, Dilip	University of California, San Diego	Fellowship in Geriatric Mental Health	DSIR
Jeste, Dilip	American Assn for Geriatric Psychiatry	Summer Research Institute in Geriatric Psychiatry	
Johnson, Kenneth	Johns Hopkins University	Behavioral & Neural Science Training Program	DBCNR
Jones, James	American Psychological Association	Minority Fellowship Program in Psychology	DMDBA/AIDS
Jones, Lawrence	University of Illinois	Quantitative Methods for Behavioral Research	DMDBA
Jones, Reginald	Hampton University	Hampton Collaborative Research Training Model	OSP
Jung, John	University of California, Long Beach	NIMH COR Honors Undergraduate Research Training	OSP
Jung, John	University of California, Long Beach	NIMH COR Honors High School Research Education	
Kameoka, Velma	University of Hawaii at Manoa	NIMH COR Honors Undergraduate Research Training	OSP
Kamin, Leon	Northwestern University	Training Basic Researchers, with Emphasis on Minorities	DMDBA
Kasl, Stanislav	Yale University	Research Training in Mental Health Epidemiology	DSIR

Katon, Wayne	University of Washington	Institutional National Research Service Award	
Katz, Ira	University of Pennsylvania Medical School	NRSA Training/ Psychiatric Comorbidity in Aging	DSIR
Keane, Terence	Tufts University Boston	Postdoctoral Training in Posttraumatic Stress Disorder	DMDBA
Kellam, Sheppard	Johns Hopkins University	Prevention Research Training in Mental Health	DSIR
Kelly, Jeffrey	Medical College of Wisconsin	NRSA Postdoctoral Training Program in HIV Prevention Research	AIDS
Kelso, J A	Florida Atlantic University	Training Program: Complex Systems & Brain Sciences	DBCNR
Killackey, Herbert	University of California, Irvine	Research Training in Biological Sciences	DBCNR
Kilpatrick, Dean	Medical University of South Carolina	Child and Adult Trauma Victims: A Training Program	DMDBA/ AIDS
Kleinman, Arthur	Harvard University	Training Program: Clinically Relevant Medical Anthropology	DSIR
Koester, John	Columbia University	Neurobehavioral Sciences Research Training Program	DBCNR
Koester, John	Columbia University	Neurobiology and Behavior Research Training Program	DBCNR
Laird, Nan	Harvard University	Training in Psychiatric Epidemiology/Biostatistics	DSIR
Leaf, Philip	Johns Hopkins University	Child Mental Health Services and Service System Research	DSIR
Leckman, James	Yale University	Training Program in Childhood Neuropsychiatric Disorders	DBCNR
Leuchter, Andrew	University of California	Research Training Psychobiological Sciences	
Levenson, Robert	University of California	Predoctoral Training Consortium in Affective Science	
Levine, Felice	American Sociological Association	Graduate Fellowship Program for Ethnic Minorities	DSIR/ AIDS
Leviton, Irwin	Brandeis University	Neuroscience: From Channels to Behavior	DBCNR
Liang, Kung-Yee	Johns Hopkins University	Biostatistics Mental Health/Psychiatry	
Lord, Catherine	University of Chicago	Training in Diagnosis of Autism Spectrum Disorders	
Link, Bruce	Columbia University New York	Research Training Program in Psychiatric Epidemiology	DSIR
Lucki, Irwin	University Pennsylvania	Training Program in Neuropsychopharmacology	DBCNR
MacWhinney, Brian	Carnegie-Mellon University	Basic Processes & Variation in Cognition	DMDBA
Madras, Bertha	Harvard University	Research Training - Biological Sciences	DBCNR
Martinez, Joe	American Psychological Association	Training in Professional Development For Neuroscientists	
Martinez, Joe	American Psychological Association	Minority Fellowship Program in Neuroscience	DBCNR
Mauro, Robert	University of Oregon	Emotion Research Training Grant	DMDBA
May, Philip	University of New Mexico, Albuquerque	New Mexico Access to Research Careers in Mental Health	AIDS/OSP

Mazade, Noel	National Association of State Mental	Public-Academic Research Fellowship Training Program	DSIR
McDaniel, J S	Emory University	HIV/AIDS Clinical Research Training Program	
Mc Ewen, Bruce	Rockefeller University	Biological & Physiological Determinants of Behavior	DBCNR
Mc Fall, Richard	Indiana University , Bloomington	Research Training in Clinical Science	DMDBA
Mc Hugh, Paul	Johns Hopkins University	Interdisciplinary Training in Psychiatry and Neuroscience	DBCNR/ AIDS
Mechanic, David	Rutgers University	Mental Health Services and Systems Research Training Program	DSIR
Milner, Joel	University of Northern Illinois	Family Violence and Sexual Assault Research Training	DMDBA
Morrissey, Joseph	University of North Carolina, Chapel Hill	Research Training in Mental Health Services & Systems	DSIR
Mortimer, Jeylan	University of Minnesota	Mental Health and Adjustment in the Early Life Course	DMDBA
Mrazek, David	Children's National Medical Center	Research Training in Early Developmental Psychopathology	DMDBA
Mullen, Edward	Columbia University, New York	Research Training in Social Work & Mental Health	DSIR
Murphy, Gregory	University of Illinois	Language Processing – A Training Program	DMDBA
Nadel, Lynn	University of Arizona	Complex Systems Summer School	
Neff, Norton	Ohio State University	Research Training in Neuropharmacology	DBCNR
Newhouse, Joseph	Harvard University	Health Policy Training Program	DSIR
Newmann, Joy	University of Wisconsin	Mental Health Service Systems Research Training	DSIR
Newport, Elissa	University of Rochester	Research Training in Learning, Development, and Biology	DMDBA
Nolen-Hoeksema, Susan	University of Michigan	Training Program in Gender and Mental Health	DMDBA
Nuechterlein, Keith	University of California, Los Angeles	Psychological Research on Schizophrenic Conditions	DSIR
Nurius, Paula	University of Washington	Mental Health Prevention Research Training Program	
Oldstone, Michael	The Scripps Research Institute	Nervous-Immune System Interactions: CNS Effects of HIV	AIDS
O'Neill, William	University of Rochester	Training in Neuroscience	DBCNR
Oxford, Gerry	University of North Carolina	Training in the Neurosciences	DBCNR
Peretz, Bertram	University of Kentucky	Behavioral Ecology & Comparative Neurobiology	DBCNR
Pilkonis, Paul	University of Pittsburgh	Clinical Research Training for Psychologists	DSIR
Pincus, Harold	American Psychiatric Association	Program for Minority Research Training in Psychiatry	DSIR
Pinker, Steven	Massachusetts Institute of Technology	Visual Cognition	
Pintar, John	University of Medicine & Dentistry of New Jersey	Molecular and Developmental Basis of Mental Illness	DBCNR
Powley, Terry	Purdue University, West Lafayette	Purdue Integrative Neuroscience Program	

Proctor, Enola	Washington University, St. Louis	GWB Mental Health Service Research Training	DSIR
Pylyshyn, Zenon	Rutgers, The State University	Visual Perception and Language	
Rabin, Bruce	Presbyterian University Hospital	Training in Behavioral Immunology	AIDS
Reder, Lynne	Carnegie-Mellon University	Computational and Behavioral Approaches to Cognitive	
Reich, Theodore	Washington University, St. Louis	Research Training in Clinical Sciences	DSIR
Reiss, Allan	Stanford University	Training for Child Psychiatry and Child Development	
Reite, Martin	University of Colorado Health Sciences Center	Development of Maladaptive Behavior	DMDBA
Reppucci, N Dickon	University of Virginia, Charlottesville	Research Training in Developmental Psychology	DMDBA
Reynolds, Charles	University of Pittsburgh	Clinical Research Training in Late-Life Mood Disorders	DSIR
Reynolds, Charles	University of Pittsburgh	Clinical Research Training in Psychiatry	DBCNR
Rhodes, Warren	Morgan State University	Minority Mental Health Research Scholars Program	
Rieder, Ronald	Columbia University, New York	Research Training: Affective & Related Disorders	DBCNR
Rieder, Ronald	Columbia University, New York	Schizophrenia Research Training	DBCNR
Robertson, Lynn	University of California, Davis	Training Program in Cognitive Neuroscience	DBCNR
Rodriguez, Wanda	University of Puerto Rico, Rio Piedras	COR High School Research Training For Hispanics	
Rohde, Charles	Johns Hopkins University	Biostatistics Mental Health/Psychiatry Training Program	DSIR
Roose, Steven	Columbia University Health Sciences	Clinical Research Training in Geriatric Psychiatry	
Ross, Lee	Stanford University	Training in Social Psychology	DMDBA
Salkever, David	Johns Hopkins University	Operations Research and Economics in Mental Health	DSIR
Sanders, Raymond	University of Akron	Dementia Research and Training Experience	
Sanders-Bush, Elaine	Vanderbilt University	Cellular & Molecular Neuroscience Training	DBCNR
Satz, Paul	University of California, Los Angeles	Neuropsychology AIDS Fellowship	AIDS
Saxena, Krishan	Grambling State University	NIMH COR Honors Minority High School Program at Grambling State University	
Saxena, Krishan	Grambling State University	NIMH COR Honors Undergraduate Research Training	OSP
Schatzberg, Alan	Stanford University	A Biobehavioral Research Training Program	DBCNR
Scheffler, Richard	University of California, Berkeley	Training in Mental Health Finance & Service Delivery	DSIR
Schneiderman, Neil	University of Miami	Biopsychosocial Research Training in Immunology and AIDS	AIDS

Schensul, Jean	Institute For Community Research	Minority Youth Action Research Training Institute	
Schulman, Howard	Stanford University	Neurosciences Research Training	DBCNR
Schulman, Howard	Stanford University	Neurosciences Training Program	DBCNR
Segal, Steven	University of California, Berkeley	Training in Mental Health Finance and Service Delivery	
Seidenberg, Mark	University of Southern California	Training in Cognitive and Computational Neuroscience	
Selzer, Michael	University of Pennsylvania	Clinical Research Education in Mental Health	
Shaffer, David	Columbia University, New York	Research Training in Child Psychiatry	DMDBA
Shweder, Richard	University of Chicago	Culture and Mental Health Behavior Training Program	
Shea, M Tracie	Brown University	Research Training in Combined Treatment Modalities	DSIR
Shiffrin, Howard	Indiana University	Modeling of Cognition	DMDBA
Shrout, Patrick	New York University	Quantitative Training for Mental Health Research	DSIR
Sigman, Marian	University of California, Los Angeles	Interdisciplinary Research in Childhood Psychopathology	DMDBA
Sloan, Lloyd	Howard University	Biobehavioral and Psychosocial Determinants of Behavior	OSP
Sloan, Lloyd	Howard University	Honors High School Research Education	
Smith, Gerald	Cornell University Medical Center	Postdoctoral Training in Eating Disorders	DMDBA
Spelke, Elizabeth	Massachusetts Institute of Technology	Development of Cognition	
Stefano, George	SUNY College at Old Westbury	NIMH COR Honors Undergraduate Research Training	OSP
Stefano, George	SUNY College at Old Westbury	High School Honors Research	
Stein, Zena	Columbia University	Behavioral Sciences Research in HIV Infection	AIDS
Steiner, Hans	Stanford University	Research Training for Child Psychiatry and Development	DBCNR
Stipek, Deborah	University of California, Los Angeles	Applied Human Development	DMDBA
Straus, Murray	University of New Hampshire	Family Violence Research Training	DMDBA
Strupp, Hans	Vanderbilt University	Research Training in Psychotherapy	DSIR
Stryker, Sheldon	Indiana University	Identity, Self, Role and Mental Health	DMDBA
Stunkard, Albert	University of Pennsylvania	Year-out Research Training for Medical Students	DMDBA
Swinney, David	University of California, San Diego	Cognition – Information Processing & Development	DMDBA
Thompson, Larry	Stanford University	Research Training in Mental Health and Aging	DSIR
Tobin, Allan	University of California, Los Angeles	Training Program in Molecular and Cellular Neurobiology	DBCNR

Toga, Arthur	University of California, Los Angeles	Training Program in Neuroimaging	DBCNR
Tomkins, Alan	University of Nebraska, Lincoln	Training in Mental Health and Justice Systems Research	DSIR/ AIDS
Townsel, James	Meharry Medical College	Training Program in Neuroscience	DBCNR
Trouth, Ovid	Howard University	NIMH/Minority Neuroscience Fellowship Program	DBCNR
Turkewitz, Gerald	Hunter College	Hunter College COR Program	OSP
Van Gorp, Wilfred	Cornell University	Neuropsychology of HIV/AIDS Fellowship	AIDS
Vaughan, Elaine	University of California, Irvine	Social and Environmental Contexts of Adaptation	DMDBA
Vierck, Charles	University of Florida	Research Training in Neurobiological Sciences	DBCNR
Waternaux, Christine	Columbia University, New York	Research Training in Mental Health Statistics	DSIR
Watson, Stanley	University of Michigan	Mental Health Research Training	DBCNR
Weber-Levine, Margaret	Morehouse College	Atlanta University Center NIMH-COR Honors Program	OSP
Wehner, Jeanne	University of Colorado at Boulder	Research Training Biological Science	
Weiner, Herbert	University of California, Los Angeles	Postgraduate Training Program in Psychoneuroimmunology	DMDBA
Weiner, Herbert	University of California, Los Angeles	Postdoctoral Interdisciplinary HIV-AIDS	AIDS
Weissberg, Roger	University of Illinois at Chicago	Prevention Research Training: Urban Children's Mental Health	DSIR/ AIDS
Williams, David	University of Michigan	Psychosocial Factors in Mental Health and Illness	DMDBA
Williams, Redford	Duke University	Stress and Behavior in Health and Disease	DMDBA
Wolfe, Barbara	University of Wisconsin, Madison	The Economics of Mental Health	DSIR
Woolson, Robert	University of Iowa	Mental Health Epidemiology and Biometry	DSIR
Wurtman, Richard	Massachusetts Institute of Technology	Neural & Endocrine Regulation of Brain & Behavior	DBCNR
Yesavage, Jerome	Stanford University	Fellowship in Mental Health and the Aged and Dementias	DBCNR
Zarit, Steven	Pennsylvania State University	Training in Research on Mental Health and Aging	DSIR
Zigmond, Michael	University of Pittsburgh	Training in the Neurobiology of Psychiatric Disorders	DBCNR/ AIDS

GRANT NUMBER: 5 T32 MH18822-12
PROJECT DIRECTOR: ADER, ROBERT, PHD
ORGANIZATION: UNIVERSITY OF ROCHESTER, MEDICAL CENTER
ROCHESTER, NEW YORK
TRAINING AREA: PRE- AND POSTDOCTORAL TRAINING IN
PSYCHONEUROIMMUNOLOGY
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This program is designed to provide interdisciplinary research training in behavior, the neural sciences, and/or immunology to pre- and postdoctoral students who: (1) would be or have been trained in the behavioral or neurosciences and seek complementary training in immunology, or (2) would be or have been trained in immunology and seek complementary training in behavior and the neurosciences. The PI's goal is to provide an integrative research experience wherein future investigators may acquire the multi-disciplinary skills to advance our understanding of the nature of and the mechanisms underlying brain-behavior-immune system interactions and their relationship to pathophysiology, i.e., autoimmune and viral (e.g., AIDS) disease. Disciplinary training at the predoctoral level is supplemented by an interdisciplinary faculty with a history of collaborative research involving interactions among brain, behavior, and immune functions at several levels of organization. Besides satisfying requirements for the Ph.D. in their own field, predoctoral students must complete additional coursework in the other departments (the basic course plus one advanced course). For postdoctoral trainees, an intensive, 2-year involvement in research is supplemented by required and elective coursework in either immunology and/or the neural sciences, and weekly, focused seminars in which the core faculty and all trainees (including predoctoral students) participate. The investigators attempt to achieve a balance between those with a background in the behavioral or neurosciences and in immunology to further research interactions among trainees and between trainees and faculty. Predoctoral students are evaluated by the degree-granting department to which they apply with additional input from the core faculty of this program; postdoctoral candidates are selected from a national pool of applicants solicited by journal ads, a descriptive brochure and personal referrals. Both pre- and postdoctoral trainees receive training primarily in the laboratories of participating faculty in the Department of Psychiatry, Neurobiology and Anatomy, and Microbiology and Immunology. The investigators aim to train their predoctoral and postdoctoral trainees so that they will be capable of independent, integrative research and will be attractive candidates for faculty positions at the increasing number of institutions that are teaching and initiating research programs in psychoneuroimmunology, including medical school departments involved in research on autoimmune and viral diseases, including AIDS.

GRANT NUMBER: 5 T32 MH19391-08
PROJECT DIRECTOR: ADLER, NANCY, PHD
ORGANIZATION: UNIVERSITY OF CALIFORNIA, SAN FRANCISCO
SAN FRANCISCO, CALIFORNIA
TRAINING AREA: PSYCHOLOGY & MEDICINE: AN INTEGRATIVE RESEARCH APPROACH
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The proposed doctoral research training program will train psychologists to do theory-based research on psychological and behavioral factors in the etiology and management of health problems. Fellows specialize either in cognitive appraisal theories of responses to stressful situations, or in cognitive-behavioral models of risk behavior. In both areas fellows examine the processes by which these factors affect health and disease, and the implications for developing effective interventions. Fellows in both specializations share core seminars and there is substantial overlap in faculty research within and between areas. The program is distinguished by its setting on a Health Sciences campus with top-rated professional schools. Its core faculty who are leading researchers in the field of health psychology and medicine further distinguishes it. This faculty is supplemented by an affiliated faculty, which includes both physicians and psychologists whose interests are at the interface of psychology and medicine. The program recruits promising researchers. During their two years of training, fellows spend about one-third time in didactic work, and two-thirds time in supervised research. All fellows take a Health

Psychology Seminar and a Research Process Seminar during both years in addition to specialized seminars. The research experience is balanced between: (a) participation in research planning and activities of the research group that the fellow has joined; and (b) development of an individual project. Cases in which outstanding fellows whose training requires participation in longitudinal research, support for a third year will be considered. Fellows also can gain experience teaching medical students.

GRANT NUMBER: 5 T32 MH14279-23
PROJECT DIRECTOR: AKIL, HUDA, PHD
ORGANIZATION: UNIVERSITY OF MICHIGAN AT ANN ARBOR
ANN ARBOR, MICHIGAN
TRAINING AREA: RESEARCH TRAINING – BIOLOGICAL SCIENCES
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The goal of this program is to provide continued support for training doctoral students in the Interdepartmental Graduate Program in Neuroscience at the University of Michigan. This program exists under the auspices of the H.H. Rackham School of Graduate Studies, and constitutes the single Neuroscience degree granting entity at the U. of Michigan, functioning across multiple schools and units, and consistently attracting excellent students. It represents one of the oldest programs in the nation, being in existence since 1970, and having been funded by this NIMH Training Grant since 1972. The present program is focused on providing training in the neurobiology of signal transduction and its relevance to brain function and dysfunction. Predoctoral students supported on this grant will complete 36 hours of core courses required by the Neuroscience Program, covering anatomical, molecular, biochemical, electrophysiological, pharmacological, physiological and behavioral aspects of the field. They will also complete two laboratory rotations and take Preliminary Exams at the end of the second year in order to advance to candidacy. Particular emphasis will be placed on acquiring both a conceptual and working knowledge of modern molecular approaches. This will be achieved through required courses in biochemistry/molecular biology, through a hands-on course on molecular techniques and through a Journal Club focused on signal transduction studies from the molecular to the behavioral. There are currently 35 graduate students in the Neuroscience Program (enrolled during the Spring of 1993 or coming in the Fall of 1994) who have a variety of backgrounds. Students nominated for support by the NIMH Training Program need to fulfill 2 requirements: a) Be deemed acceptable to the Neuroscience Program at large; and, b) Have the interest and qualifications needed to focus on molecular neurobiological studies of signal transduction. The Training Grant Faculty is a newly defined subset of the Neuroscience Program faculty with interests in neurobiological systems of relevance to signal transduction from the molecular to the whole animal levels. The group participating in this application is diverse, coming from numerous different departments and representing a number of schools including the College of Literature, Arts & Science (LS&A), and the Medical School. Yet, these investigators have many common interests and are highly interactive in terms of research. Students will also have access to the rest of the faculty in the Neuroscience Program because of their involvement in many aspects of the program including teaching and committee work; these faculty members can serve as co-mentors for students on this grant. The NIMH Training Grant will be administered by the Director and co-Director of the Neuroscience Program with the help of a Steering Committee. It will function within the context of the Neuroscience Program, and will interface closely with its Executive Committee. The students will have access to world-class facilities and laboratories, in the context of a rich and supportive environment.

GRANT NUMBER: 5 T32 MH19132-09
PROJECT DIRECTOR: ALEXOPOULOS, GEORGE S, PHD
ORGANIZATION: CORNELL UNIVERSITY MEDICAL CENTER
NEW YORK, NEW YORK
TRAINING AREA: POSTGRADUATE RESEARCH TRAINING IN MOOD DISORDERS
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The program focuses on geriatric mood disorders because they constitute a major clinical and public health problem and offer a model for training in geriatric research. Since mood disorders interact with a variety of biological, behavioral and psychosocial factors, the program will provide rich opportunities for trainees to study complex research methodology. The trainees will be psychiatrists or Ph.D. psychologists. The typical duration of training will be 2 years, although 1 or 3 year programs may be offered to trainees with special needs. Training will rely on the teaching and research experience of a large multidisciplinary faculty with a history of productive scientific collaboration and strong personal ties for 15 years. The program will utilize the rich and diverse patient populations of the clinical services of the Geriatrics Division the training and research structures of the Developing Clinical Research Center for Geriatric Mood Disorders and a number of collaborating laboratories. The multiple training programs of Cornell University Medical College enrich the program's intellectual atmosphere and will serve as sources of recruitment and as teaching sites for the research fellows. Seven training components now cover: aging and personality, course of geriatric mood disorders, chronobiology and aging, psychosocial interventions, neuroimaging, geriatric psychoendocrinology, and geriatric clinical psychopharmacology. Each trainee will focus on one of these components for most of his/her training but the remaining components will be available for additional experience. The training program relies on the preceptor-trainee relationship in which the preceptor assists the trainee to develop a research project, prepare an application for one of our two intramural competitive funding programs (exposure to review process), and collect, analyze and report research data. A core curriculum and a clinical experience will be offered as well as formal courses and a tutorial tailored to the trainee's needs.

GRANT NUMBER: 1 T32 MH19989-01
PROJECT DIRECTOR: AMARAL, DAVID G, PHD
ORGANIZATION: UNIVERSITY OF CALIFORNIA DAVIS
DAVIS, CALIFORNIA
TRAINING AREA: TRAINING PROGRAM IN SYSTEMS NEUROSCIENCE
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This is a revised proposal that seeks funding to support multi-disciplinary predoctoral training in Systems Neuroscience - the analysis of neural systems that underlie behavior - by creating the Training Program in Systems Neuroscience. The Program is designed to produce new Ph.D.s and postdoctoral scientists who are capable of establishing independent research programs in neuroscience. It will operate under the auspices of the Graduate Program in Neuroscience, a recently established multi-disciplinary program that encompasses faculty from several departments at the University of California, Davis. This application is prompted by the establishment of the Center for Neuroscience and the rapid expansion of the neuroscience community at UC, Davis. In the past five years, UC Davis has recruited 10 new faculty members in the area of systems neuroscience, and the strong institutional commitment to the continued development of neuroscience has made UC Davis an ideal environment for the multi-disciplinary training of neuroscientists. Funds are requested for five years to support four predoctoral and four postdoctoral students. The Trainers for this program include 26 extramurally funded UC Davis neuroscientists whose research interests range from the molecular biology of calcium channels, to neurophysiological analyses of primate sensory cortices, to neuropsychological analyses of patients with focal brain damage. Many of the faculty emphasize research in mental-health related areas. Graduate trainees will participate in course work, including a comprehensive Core Course in Neuroscience, laboratory rotations designed to aid them in selecting an appropriate research sponsor, mentored research projects, journal clubs, and lecture series that equip them to conduct research

responsibly, professionally, and successfully. While postdoctoral students will also participate in that lecture series, their training will emphasize intensive, mentored programs of research. Particular emphasis will be placed on training postdoctoral students to achieve independent research funding. The Training Program will sponsor an annual retreat, during which trainees and other neuroscience graduate students will present their research. Trainees will also participate in the organization of a biweekly seminar series in neuroscience. In order to provide additional instructional resources to trainees and members of the graduate and postgraduate neuroscience community, a Neurosciences Resource Center will be developed that will contain computer-aided instructional materials in neuroscience and facilities for independent research in computer simulation of neural systems.

GRANT NUMBER: 5 T32 MH19113-08
PROJECT DIRECTOR: ANDREASEN, NANCY C, MD, PHD
ORGANIZATION: UNIVERSITY OF IOWA
IOWA CITY, IOWA
TRAINING AREA: RESEARCH TRAINING, MAJOR PSYCHOSES & CLINICAL
NEUROBIOLOGY
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): A Postdoctoral Fellowship Training Program in clinical neuroscience is proposed. This is a multidisciplinary program, particularly designed to train young investigators in clinical neuroscience areas relevant to the study of major psychoses. All trainees will be required to develop a set of core skills (biostatistics and standardized clinical assessment), but they will also develop expertise in a special skill area: e.g., magnetic resonance imaging (MRI), positron emission tomography (PET), or basic or cognitive neuroscience. This training program will build on existing research facilities such as our Mental Health Clinical Research Center (MHCRC), which consists of three core units (Administrative, Assessment and Training, and Biostatistics) and six research units (Diagnosis and Phenomenology, Magnetic Resonance, Functional Neuroimaging, Cognitive Neuroscience, Genetics and Epidemiology, and Neuropharmacology). Trainees will be encouraged to identify a mentor as early as possible to develop an area of special expertise; each trainee will be expected to design and complete at least one research protocol during the second year of the training program.

GRANT NUMBER: 5 T32 MH18261-14
PROJECT DIRECTOR: ATTKISSON, CLIFFORD C, PHD
ORGANIZATION: UNIVERSITY OF CALIFORNIA
SAN FRANCISCO, CALIFORNIA
TRAINING AREA: CLINICAL SERVICES RESEARCH TRAINING PROGRAM
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This application requests support for a multidisciplinary, 2-year clinical services research postdoctoral training program based in the School of Medicine, UCSF. Postdoctoral trainees are psychologists, psychiatrists, sociologists, nurses, and other social and behavioral scientists. The major aim of this program is to address the national need for scientists with advanced training and expertise who will lead and conduct research that is critical for enhancement of mental health services and systems of care. Major elements of the training program include required coursework and seminars and a research apprenticeship with a faculty member. Required work includes courses in biostatistics, health economics, professional conduct, research ethics, and a comprehensive research methods seminar. Additionally, an ongoing colloquium series promotes professional development in the clinical services research arena. Trainees are further encouraged to enroll in elective courses and directed readings to complement required coursework and the research experience. The apprentice role occurs within the context of a preceptor's clinical service research activities and is progressively expanded into a full collaboration on an aspect of the research problem. Trainees are supported in developing the multidisciplinary, collaborative, and negotiation skills

required of clinical services researchers. Two important program features in this regard are: exposure of trainees to an array of mental health service delivery settings in which ongoing clinical services research is conducted by program faculty and their associates; and formation of collaborative learning and research relationships among the fellows and with faculty. The faculty is composed of senior, established investigators with ongoing clinical services and related research as well as junior investigators who have generated a solid research trajectory. Areas of research currently conducted by participating faculty include studies of organization, financing, and delivery of mental health and related human services to seriously and persistently mentally ill adults, adolescents, and children; service system studies of the co-occurrence of mental disorder and substance abuse; studies of mental health services in primary care settings; studies of mental health services delivery to persons with AIDS and ARC; studies of the implications of violence and violence potential for the delivery of mental health services; and studies of service systems needs of high risk, vulnerable children including those who have been abducted.

GRANT NUMBER: 2 R25 MH18910-11
PROJECT DIRECTOR: ATTKISSON, C C, PHD
ORGANIZATION: UNIVERSITY OF CALIFORNIA, SAN FRANCISCO
SAN FRANCISCO, CALIFORNIA
TRAINING AREA: SHORT TERM RESEARCH TRAINING FOR MINORITY
UNDERGRADUATES
(POSTDOCTORAL)

DESCRIPTION (Applicant's abstract): This application proposes the competing continuation of a high impact multidisciplinary short-term research educational program for underrepresented minority undergraduates administered by the Graduate Division of the University of California San Francisco (UCSF). UCSF aims to recruit undergraduates who seek research careers in the health sciences, particularly in the biomedical and social science fields. The educational program provides intensive research training in the context of ongoing faculty research activities and is enhanced by colloquia and seminars in biological and social science. All faculty, including minority faculty members, are established investigators whose scientific investigations are well-respected and supported. The UCSF provides extensive support for the proposed training program. Included in this in-kind support are faculty mentor time and research resources, teaching assistance costs, housing costs, supplies and training related expenses, recruitment costs, local transportation costs of participants, and administrative and clerical costs. Thirty undergraduate students will be selected as trainees in each grant year. UCSF will continue to increment its in-kind support for this program in each of the proposed continuation years. UCSF will also continue to develop collaborative relationships with other campuses of the University of California, with other institutions of higher education, and the NIMH so that the UCSF training model can be disseminated nationally. Undergraduate Participants: The proposed educational program is a continuation and further refinement of a training program already in place at UCSF. The program is well-established on campus, enjoys strong administrative support, and has enthusiastic faculty support and participation. To date, UCSF has received 2036 applications from undergraduate students at 313 institutions of higher education. From this applicant pool, 271 highly qualified individuals have participated in a 10-week intensive research mentorship. Thirty-nine students were appointed in 1997 of whom 30 were supported by NIMH resources. Graduates of the program give it very high marks and the vast majority (71%) have subsequently enrolled in graduate academic and graduate professional education. Extensive recruitment will continue and will include linkages to the UC system, RBCUs, and other prominent four-year institutions. At completion of training, program graduates will demonstrate ability and potential to pursue successful careers as health science researchers. Educational Facilities: The UCSF is a major health sciences research university with internationally recognized graduate academic and professional programs, organized research programs and institutes, and, in collaboration with Stanford University, is a renowned center for health care services. The UCSF Graduate Division offers 18 separate academic programs (enrolling over 1000 students) offering the Ph.D. and the master's degree in the biological, social, and behavioral sciences. The Graduate Division, along with UCSF's extensive research and clinical facilities, provides an extraordinary array of resources to draw upon as the proposed educational program is refined over time.

GRANT NUMBER: 5 T34 MH16926-17
PROJECT DIRECTOR: BANKS, PAMELA G, PHD
ORGANIZATION: JACKSON STATE UNIVERSITY
JACKSON, MISSISSIPPI
TRAINING AREA: NIMH COR HONORS UNDERGRADUATE RESEARCH TRAINING
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This proposal is for the COR/MARC undergraduate program that is in its fourteenth year at Jackson State University (JSU), a Historically Black University, founded in Mississippi in 1877 as a church school and included in the state system as of 1934. JSU now has masters and doctoral programs. Approximately 95% of JSU students are African-American. The JSU NIMH-COR Undergraduate Research Training Program provides special research-training experiences to talented undergraduates majoring in biology, chemistry, health, psychology, social work, and sociology, who are underrepresented in the behavioral and biomedical mental-health-oriented research arena. The overall goal is to increase the pool of ethnic minority students who can compete successfully for entry into research career training programs leading to doctoral-level mental health research careers. A special COR/MARC 21- semester-hour curriculum has been developed. Courses in research methodology, computer utilization, issues in mental health, alcohol and drug abuse, and instrumentation are integrated into the regular degree curriculum and offered to junior and senior undergraduates with a GPA of 3.0 or higher. These trainees are exposed to four semesters of research training activities, and they conduct individual research projects under the supervision of designated on-campus mentors. Trainees present their papers at professional meetings and attend weekly research seminars and other research forums where experienced researchers and other professionals present information to help expand the trainees' knowledge of research and services in the mental health field. Trainees participate in out-of-state summer research internship experiences, designed to further expose them to hands-on training in how to conduct research and to further enhance the opportunity to gain admission and complete mental health related advanced-degree programs. Personal and career counseling are also available.

GRANT NUMBER: 5 R25 MH57113-02
PROJECT DIRECTOR: BANKS, PAMELA G, PHD
ORGANIZATION: JACKSON STATE UNIVERSITY
JACKSON, MISSISSIPPI
TRAINING AREA: NIMH COR HONORS HIGH SCHOOL RESEARCH EDUCATION GRANT
(PREDOCTORAL)

DESCRIPTION (Adapted from Applicant's Abstract): The JSU NIMH-COR Honors High School Research Education Program seeks to provide special research training experiences to talented minority high school students, interested in pursuing an undergraduate education in Psychology, Biology or Chemistry, who are underrepresented in the behavioral and bio-medical research arena. The mission of this program is to stimulate interest and motivation among high school students from racial/ethnic minority groups to make a career choice in science disciplines related to mental health. Four high school students with a GPA of 3.0 or higher (4.0 scale) will be selected from area high schools to participate in a hands-on research experience under the supervision of an experienced research mentor. Students will be active in the program during their junior and senior years. Year-round research training activities will be made available to the trainees; however, during the summer, for a period of 10 weeks, the trainees will work full time in one of the research laboratories in psychology, biology or chemistry at JSU. The students will gain experience in research design, instrumentation, data collection, data analysis, research report writing, and preparing a poster and/or slide presentation for a professional meeting. During monthly seminars and 2-3 supervisory sessions per month during the school term, trainees will be given instructions and assignments by their mentors and/or the Program Director. These sessions will focus on numerous research skills, including how to conduct a literature review, how to summarize research articles, how to use word-processing and statistical software, how to formulate a research question, etc. The

high school will participate in the Guest Lecture Series, the NIMH-COR weekly seminar (once a month) and the JSU NIMH-COR Research Colloquium, all of which are well-established experiences for the NIMH-COR Honors Undergraduate Research trainees. The Undergraduate research trainees will serve as quasi-mentors to the high schoolers and will demonstrate in seminar some of the skills acquired as research trainees. Personal and career counseling will also be available. Letters of support have been secured from area high school principals. Students will be evaluated in terms of completion of the high school degree, acceptances to undergraduate programs related to mental health, scholarships, presentations at science fairs or research forums, awards, etc. The Undergraduate training program is in its 14th year at JSU and has been implemented successfully. Initiation of the NIMH-COR Honors High School Research Education Program at Jackson State University as a component of the NIMH-COR Undergraduate research training program (Jackson, Mississippi) is proposed.

GRANT NUMBER: 5 T32 MH19552-07
PROJECT DIRECTOR: BARONDES, SAMUEL H, MD
ORGANIZATION: UNIVERSITY OF CALIFORNIA, SAN FRANCISCO
SAN FRANCISCO, CALIFORNIA
TRAINING AREA: MOLECULAR APPROACHES TO MENTAL ILLNESS
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This application is for an Institutional Postdoctoral Training Program in Molecular Approaches to Mental Illness under the auspices of the Center for Neurobiology and Psychiatry, a unit of UCSF's Department of Psychiatry. Its main goal is to train investigators to use cellular and molecular techniques to solve psychiatric problems. Recent advances in genetics, molecular biology, and neuroscience have stimulated research into the biological basis of psychiatric disorders. Because psychiatry has not traditionally emphasized molecular sciences, and a few basic scientists have been interested in addressing complex psychiatric problems, there is a scarcity of investigators both willing and able to apply these approaches to the understanding and treatment of psychiatric disorders. The program proposed in this application will train three types of fellows: psychiatrists with M.D./Ph.D. degrees; psychiatrists with M.D. degrees; and non-psychiatrists with an interest in psychiatric research (with Ph.D. or M.D./Ph.D. degrees). All fellows will be provided with a program consisting of a three-year full-time laboratory experience supervised by a member of the core faculty, a core seminar series, and appropriate formal course work. Each fellow will be funded by the grant for only one year of the training experience, with the other two years provided by other sources, mainly individual fellowships. The program will be directly by an Executive Committee (Drs. Barondes, Freimer, and Malenka). There will be core faculty members, clinical-scientist faculty and participating faculty. All core faculty have an M.D. or combined M.D./Ph.D. degree and are all fully trained in clinical psychiatry and have active research programs. The training program should provide fellows with the requisite skills to contribute, as independent investigators, to the solution of clinical problems in psychiatry, using cellular and molecular approaches.

GRANT NUMBER: 5 T32 MH19118-08
PROJECT DIRECTOR: BEAR, MARK F, PHD
ORGANIZATION: BROWN UNIVERSITY
PROVIDENCE, RHODE ISLAND
TRAINING AREA: TRAINING PROGRAM IN SYSTEMS & BEHAVIORAL NEUROSCIENCE
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This program supports predoctoral and postdoctoral training in the study of the brain at the level of neural systems and behavior. The program is intended to produce new Ph.D.'s and postdoctoral scientists capable of establishing independent research in the interdisciplinary field of neuroscience. The Graduate Program in Neuroscience will operate the training program, which is part of the new Department of

Neuroscience at Brown University. This new department has been formed by merging two earlier academic units covering differing aspects of neuroscience, and the merger was catalyzed by the success of the graduate training program supported by the first three years of this training grant. The members of the training faculty are drawn from the 28 faculty in the Graduate Program as a whole. Their research is on the mechanisms of the brain, which cause behavior, with a strong focus on use of combined methods at different levels of analysis to understand specific brain systems. Some faculty work at the cellular level to understand processes which specifically manifest themselves in the overall performance of the systems to which these cells belong, while others work at the level of neuronal populations to understand their connectivity of information-processing functions in relation to behavior. Several faculty use behavioral measures in conjunction with physiological experiments and modeling of neural systems, while others work with computational models, bringing behavioral or physiological data to bear on testing the validity of the model. The breadth of training in the program is enhanced by emphasizing the advantages of using a variety of different methods and the different perspectives these methods bring to research, rather than having individual laboratories separately study brain function using anatomical, physiological, behavioral, or quantitative methods in isolation. The program uses courses, supervised laboratory research, a strong colloquium series, seminars, journal clubs, and special social-scientific functions to train students in the practical, day-to-day conduct of research on brain function from a multidisciplinary perspective.

GRANT NUMBER: 5 T32 MH19905-05
PROJECT DIRECTOR: BENES, FRANCINE M, PHD, MD
ORGANIZATION: MC LEAN HOSPITAL
BELMONT, MASSACHUSETTS
TRAINING AREA: CLINICAL NEUROSCIENCE TRAINING PROGRAM FOR HARVARD
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This is a Clinical Neuroscience Training Program (CNTP) that has been developed by the Consolidated Department of Psychiatry at Harvard Medical School. This program will train post-doctoral fellows with either a Ph.D. or a M.D. degree to direct their careers toward disease-oriented investigations at both the basic and applied levels. In the first year, both Ph.D. and M.D. trainees will serve as tutors in the Neuroscience Course for Harvard medical students and will participate in discussions of how both neurological and psychiatric disorders can be understood in relation to basic neural mechanisms. During the first and second year, participating faculty will present a seminar series consisting of four modules. Module I, Advanced Topics in the Neurobiology of Mental Disorders, is a series of lectures on clinical and applied investigations in which a variety of structural and molecular approaches are used to study neuropsychiatric disorders. To formally teach Ph.D. basic scientists about psychiatric illness, Module II, Clinical Psychiatry for the Basic Scientist, will consist of live interviews with patients having various major Axis I diagnoses and a discussion of the differential diagnosis using the DSM-III-R. The diagnoses involved include schizophrenia and dementia, the topics of the fellowship program, but also bipolar illness, panic disorder, obsessive-compulsive disorder (OCD), and delirium, and it is not clear how much one can learn about clinical psychiatry from these six sessions. Module III is a Journal Club in which research reports of both clinical and basic information concerning the mental disorders will be critically evaluated in terms of the types of methodology, the types and numbers of variables, the method of analysis and the conclusions that are drawn. Module IV, Basic Research Skills, will cover statistical approaches, preparation of manuscripts, lecturing and grant writing. The overall emphasis of the CNTP will be on the strategies that can be used for either modeling or directly investigating neuropsychiatric disorders. Throughout the two-year fellowship, all trainees will be assigned to one of the participating neuroscience laboratories where they will actively engaged in cellular and/or molecular studies related to neuropsychiatric disorders such as Alzheimer's disease and schizophrenia. During Module IV, there will be workshops in which the trainees will use materials from their own research project and, together with their mentor, will develop manuscripts, lectures and grants for presentation. Three-month positions will also be available for medical students showing interest in pursuing a career path in disease-oriented basic or applied neuroscience. Overall, this training program will provide trainees with the necessary background and tools to become productive neuroscientists who use a broad range of cellular and molecular approaches to study neural circuitry in relation to

mental illness.

GRANT NUMBER: 5 T35 MH19880-06
PROJECT DIRECTOR: BENOIT, MARILYN B, PHD
ORGANIZATION: AMERICAN ACADEMY-CHILD/ADOLESCENT PSYCHIATRY
WASHINGTON, DISTRICT OF COLUMBIA
TRAINING AREA: AACAP MINORITY RECRUITMENT INTO RESEARCH CAREERS
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The primary objective of the American Academy of Child and Adolescent Psychiatry (AACAP) Minority Recruitment into Research Careers Program is to increase the number of underrepresented minorities (African American, Native American, Alaskan Native, Mexican American, Hispanic, and Pacific Islander) in the field of child and adolescent psychiatric research. This program is a continuation and further refinement of the recruitment model developed in the 1991 and 1992 AACAP pilot projects to recruit minorities into child and adolescent psychiatry research. This program will provide stipends to minority medical students for intensive short-term research training in child and adolescent psychiatry. Using this mechanism, the program will provide early exposure to research in child and adolescent psychiatry and personal contact with established research mentors who may influence and help guide students' career decisions. This project will provide minority medical students with exposure to research, with the goals of recruiting minority students into child and adolescent psychiatry, as well as propelling them onto a research track. Each student will participate in laboratory work and in specific aspects of research arranged with the mentor and laboratory director. As part of the training experience, the student will write a paper, which describes his or her own training experience, and reports on research findings. An outstanding student will be selected each year to serve on the selection committee for the following year. All applicants will be tracked through and after medical school to determine how many pursue careers in child and adolescent psychiatry research.

GRANT NUMBER: 5 T34 MH19134-10
PROJECT DIRECTOR: BERNAL, GUILLERMO, PHD
ORGANIZATION: UNIVERSITY OF PUERTO RICO
SAN JUAN, PUERTO RICO
TRAINING AREA: HISPANIC COR: TRAINING IN BIOPSYCHOSOCIAL RESEARCH
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This application requests support for the NIMH Hispanic Career Opportunities in Research COR: Training in Biopsychosocial Research Program at the University of Puerto Rico, Rio Piedras Campus. The Program is now completing its seventh year. The rationale for the program is based on the need to produce highly qualified researchers that can address the problems of Hispanics in mental health and HIV-AIDS (MHA). During the seven years of operation, the program has been able to accomplish the goals for which it was created, namely, to promote an increase in the number of Puerto Rican students admitted to doctoral programs to pursue careers in MHA research. All 26 of our graduates have been accepted to graduate programs and all have been offered financial support for their doctoral studies. Over a third of these graduates have been awarded highly competitive national fellowships in their respective fields. In this application we propose the continuation of the program for additional years and its expansion of the number of participating students. The primary goal of the program is pursued throughout the following aims: 1) provide intensive programmed early research training to undergraduate students to motivate them for roles on biopsychosocial research with Hispanic populations; 2) strengthen the biopsychosocial research curricula in Psychology, Sociology, Anthropology, Biology, and Education; and 3) provide intensive academic and career counseling to promote entrance into graduate schools. To accomplish these aims the Hispanic COR program includes five major components: a) a research practicum and mentorship experience designed for early experiences in research that culminates in the design and implementation of a thesis

project; b) a core curriculum designed to provide students with basic research courses above and beyond those already part of the specific undergraduate major; c) co-curricular activities consisting of weekly research seminars, research workshops, lectures, teaching conferences, participation at scientific meeting, etc.; d) academic and career counseling aimed at supporting students for entrance into graduate schools and providing skills specific to graduate school entry (e.g., applications, resume writing, training for GRE, etc.); and, e) a process and outcome evaluation of the program.

GRANT NUMBER: 5 T32 MH19544-08
PROJECT DIRECTOR: BICKMAN, LEONARD, PHD
ORGANIZATION: VANDERBILT UNIVERSITY
NASHVILLE, TENNESSEE
TRAINING AREA: CHILDREN'S MENTAL HEALTH SERVICES RESEARCH TRAINING
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This application seeks funds to train research scientists studying mental health services for children and adolescents. The goals of the Vanderbilt University Children and Adolescent Mental Health Services Research Training Program are: (a) prepare trainees to have the requisite commitment, understanding, and technical expertise to design and execute sophisticated research on mental health services for children and adolescents; (b) to introduce trainees to participation in research that improves community-based mental health services and clinical outcomes. All trainees that have been funded by this program currently are involved in mental health services research. As a result of training, this trainee group has completed 80 articles or presentations at leading conferences on mental health services research or universities. The quality of research at the Center for Mental Health Policy has been enhanced, as indicated by the ongoing participation of faculty and trainees in the NIMH-funded follow-up of the largest research project designed to evaluate a comprehensive and coordinated system of mental health services for children and adolescents, the Fort Bragg Demonstration Project. This project and other research is investigating mental health outcomes and service utilization, as well as the evaluation of services implementation, services quality and cost of new systems of care. A recently submitted application for the establishment of a Research Center focuses on the basic elements of treatment conducted in community treatment settings and examines why community-based services are less effective. Funds are requested for both pre- and postdoctoral trainees. The length of training grant support is three years for both predoctoral and for post-doctoral trainees. Predoctoral students in their fourth year will serve as research assistants on funded grants and receive a full tuition grant from their respective departments of the remainder of their course requirements. The program emphasizes the interdisciplinary nature of the field in that trainees come from diverse backgrounds and faculty are represented from psychology, psychiatry, public policy and program evaluation, and pediatrics. To ensure that the trainee develops expertise in the wide range of research tools needed, learns about the various areas of mental health, and obtains research experience in a variety of settings, the grant program includes five primary components: (1) the faculty advisor system; (2) the curriculum; (3) the research seminar; (4) participation in ongoing research; and (5) field placements.

GRANT NUMBER: 5 T32 MH15157-22
PROJECT DIRECTOR: BOWER, GORDON H, PHD
ORGANIZATION: STANFORD UNIVERSITY
STANFORD, CALIFORNIA
TRAINING AREA: ANALYZING HUMAN ABILITIES
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The purpose of this program is to train graduate students for research in cognition, with special attention to analysis of skills in perception, learning, memory, judgement, language, reasoning, problem solving, and decision making. Trainees will be predoctoral students working towards a Ph.D. in

psychology. Through formal courses, specialized seminars, and apprenticeship research, students are trained in past and current work in experimental cognitive psychology, theoretical advances, and new developments in experimentation. The training program generally requires four years beyond the bachelor's degree, and follows the requirements of the Ph.D. program of the Psychology Department. From the beginning, students work closely with one or more faculty members to select a set of courses and develop a research program best suited to their scientific interests and goals. In-depth survey courses in sub-areas of cognitive psychology are supplemented with state-of-the-art seminars and complemented by courses in related areas, such as neuroscience, linguistics, education, human factors, and artificial intelligence. Students also have opportunities for applied research in laboratories within the University and nearby research institutes with which the faculty members have close affiliations. Funds are requested to support full time predoctoral trainees. Approximately 85 students apply each year for admission to the cognitive program. Those who enroll are selected for their outstanding promise for a productive career. Many of the graduates take academic positions in teaching and research, but a significant number elect positions in applied settings, in research or development of products designed to supplement or increase human effectiveness in perception, learning, memory, reasoning, and decision making.

GRANT NUMBER:	5 T32 MH19138-09
PROJECT DIRECTOR:	BOWER, JAMES M, PHD
ORGANIZATION:	CALIFORNIA INSTITUTE OF TECHNOLOGY PASADENA, CALIFORNIA
TRAINING AREA:	PREDOCTORAL TRAINING IN COMPUTATION & NEURAL SYSTEMS (PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This program provides predoctoral training for students preparing for research careers in Computation and Neural Systems. It involves faculty members from the Biology Division, Computer Science, Physics, Engineering & Applied Sciences, Chemistry and Biology, and Engineering & Applied Sciences and Biology. The CNS program is organized jointly by the Divisions of Biology, Engineering and Applied Science and Physics, Mathematics and Astronomy. The program's objective is to provide trainees with a broad knowledge of an inherently multidisciplinary field, while at the same time requiring an appropriate depth of knowledge in the particular field of the thesis research. There are three closely intertwined facets to the CNS program: 1) understanding how computations are carried out within the nervous system; 2) understanding from a theoretical standpoint how information processing can be efficiently achieved by massively parallel networks of neuron-like elements; and 3) designing and fabricating artificial devices (electronic and optical) that are capable of processing information in ways analogous to those used by biological systems. The major components of the training activities are: 1) each student's individual research program under one or more faculty sponsors; 2) an organized curriculum of graduate courses; 3) preparation for qualifying examinations; and 4) an extensive seminar program. Support is requested in each year for predoctoral trainees. Criteria for admission to the CNS program will include evidence of an early interest in Neuroscience as shown by having taken introductory courses in Neuroscience. The training faculty is located within several buildings clustered near each other on the north side of the Caltech campus. One entire floor of the new Beckman Institute for Biological and Chemical Research has been devoted to support for the CNS graduate program. This floor includes classrooms, seminar rooms, and a variety of special facilities that are central to the program, such as a computer simulation laboratory.

GRANT NUMBER: 5 T32 MH18951-08
PROJECT DIRECTOR: BRENT, DAVID A, PHD
ORGANIZATION: UNIVERSITY OF PITTSBURGH AT PITTSBURGH
PITTSBURGH, PENNSYLVANIA
TRAINING AREA: CLINICAL RESEARCH TRAINING IN CHILD PSYCHIATRY
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This application is for a two-year postdoctoral clinical research training program for child psychiatrists, child psychologists, and other professionals in related fields. The training program aims to help trainees develop original ideas and acquire the capacity to carry out independent, funded research. The emphases of the program are on the development of researchers with expertise in at least one of the following areas: (1) psychosocial and pharmacologic clinical trial methodology; (2) psychobiological and psychosocial influences on the onset and course of early-onset psychopathology; or, (3) research that involves one of the basic sciences of child psychiatry - developmental psychology, genetics, or developmental neurobiology. In order to accomplish these goals, an interdisciplinary group of training and participating faculty with a long history of interdisciplinary research and training are actively involved in the program, representing child psychiatry, developmental and clinical child psychology, statistics, genetics, epidemiology, pharmacology, and developmental neurobiology. Because of the clinical research breadth and depth in both child and general psychiatry, as well as in the above noted departments, this program offers a unique opportunity for trainees, and affords them a high likelihood of success. This program has several components. Foremost is the apprenticeship to an academically successful mentor who will assign the trainee to work on existing projects, supervise them in the development of a critical review paper suitable for publication, and of a protocol that will lead to independent research and funding. Second, trainees must acquire certain core knowledge in statistics and research design, child development, and developmental neurobiology as well as more specialized course work, dependent on the goals and interests of the trainee. An individually tailored course of didactic study will be prescribed to each trainee. While this plan is appropriate, the program would be strengthened by the addition of courses in epidemiology and genetics as they apply to child mental health. Third, trainees need to acquire core skills in: (1) critical appraisal of literature, (2) grant writing and project management, and (3) managing ethical issues in research via specialized seminars which have been developed in each of these areas. Progress during the past program period has been adequate. Three trainees have graduated, one has received a Scientist Development Award, another is co-investigator on several funded studies, and the third has received a seed award; all have published papers in peer-reviewed journals. Support is requested for post-residency child psychiatrists and post-doctoral child psychologists (or doctorally prepared in a related field) in year 01, and for post-residency child psychiatrists and post-doctoral child psychologists (or doctorally prepared in a related field) in years 02 to 05.

GRANT NUMBER: 5 T34 MH19519-07
PROJECT DIRECTOR: BUCKNER, REBECCA R, PHD
ORGANIZATION: TALLADEGA COLLEGE
TALLADEGA, ALABAMA
TRAINING AREA: TALLADEGA COLLEGE COR UNDERGRADUATE HONORS PROJECT
(PREDOCTORAL)

DESCRIPTION: This application is a request for continued funding of the Talladega COR Undergraduate Honors Project for five years in the total amount of \$654,610. The goals of the project are as follows: (a) To increase the number of well-prepared students enrolled in an historically Black college (HBC) who can compete successfully for entry into doctorate level or medical doctor (M.D.) programs in disciplines related to mental health; (b) to develop and strengthen psychology, social work, sociology/anthropology, biobehavioral epidemiological prevention/intervention and/or public health curricula and training opportunities in an institution with a substantial racial/ethnic minority enrollment in order to prepare students for research careers related to mental health; (c) to provide a pool of minority candidates for doctoral-level training leading to careers in mental health; and (d) to provide a COR Honors Program in the behavioral and social sciences which will serve as a goal and incentive for prospective young minorities who are

members of those behavioral and social science disciplines which include psychology, social work, and sociology/anthropology.

GRANT NUMBER: 5T35MH19390-09
PROJECT DIRECTOR: BURRIS, JOHN E, PHD
ORGANIZATION: MARINE BIOLOGICAL LABORATORY
WOODS HOLE, MASSACHUSETTS
TRAINING AREA: TRAINING IN METHODS IN COMPUTATIONAL NEUROSCIENCE
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The goal of the Methods in Computational Neuroscience Course at the Marine Biology Laboratory is to train advanced students and post-doctoral fellows each year in the fundamental intellectual issues in computational neuroscience and to avail them with analytical and numerical tools to assist in their studies. The course has unique features that would be hard if not impossible to replicate in a university setting. First, it continues to attract and educate students from a broad range of established disciplines that impact upon neuroscience, including biology, cognitive science, computer science, engineering, mathematics and physics. Secondly as a means to provide a coherent and relatively complete perspective on the growing field of computational neuroscience, students are exposed to a large visiting faculty in addition to receiving instruction and guidance from the directors, scholars-in-residence, and course assistants. It is unlikely that such a combination of faculty could be convened for an analogous course in a university setting. Lastly, the course provides students with access to state-of-the-art computational techniques and computer hardware fundamental to simulating neural systems from the detailed cellular through the more abstract systems level. The course is organized as an intensive four-week lecture and laboratory series. The lectures progress along an increasing scale of computational complexity. They initially focus on the electrophysiology and chemical dynamics of individual neurons and synapses. This is followed by lectures on the dynamics and plasticity of local neuronal circuits and small nervous systems, topics that illustrate how single-cell properties shape computations by small networks. A final series of lectures addresses computations that involve sensory and perceptual issues in large neuronal systems, particularly cortex, and the emerging application of abstract models to provide a framework for understanding these systems. The laboratory emphasizes the spectrum of tools necessary for successful research in computational neuroscience. On the one hand, the course provides training with general purpose simulation software, such as Phase Plane, as well as with simulation software that is specific to single cell dynamics, such as Neuron, or to both single cells and large networks, such as Genesis. On the other hand, students are trained in areas of applied mathematics, such as probability theory and matrix algebra, that are essential to formulating and solving problems in the field.

GRANT NUMBER: 5 T35 MH19965-04
PROJECT DIRECTOR: BURRIS, JOHN E, PHD
ORGANIZATION: MARINE BIOLOGICAL LABORATORY
WOODS HOLE, MASSACHUSETTS
TRAINING AREA: NEUROBIOLOGY AND DEVELOPMENT OF THE LEECH
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The goal of the Neurobiology and Development of the Leech (N&DL) summer course at the Marine Biological Laboratory is to train advanced students in cellular, behavioral and developmental neurobiology. This course began in 1974, and has been offered in alternate summers at the MBL since 1984 with a faculty of internationally recognized neurobiologists who utilize the leech as an experimental preparation. The students are immersed in an intensive 3 week program that integrates single-cell electrophysiology, quantitative biophysics and neural development in a manner whose intensity and breadth is not attained in most university settings, and acquire experimental techniques and a conceptual understanding of modern neurobiology that

significantly advance their research careers. Moreover, the N&DL Course is unusual in that it allows the students to utilize a single organism, the leech, to integrate information from a variety of disciplines, and demonstrates the value of analyzing different aspects of a single system in detail. The Leech Course consists of a 3-week series of laboratory exercises and lectures divided into 3 modules. In the first module, the students learn the rudiments of intracellular recording, and utilize this approach to analyze synaptic function, sensory and motor system organization, and the analysis of neural circuitry underlying complex behaviors. The second module builds on this cellular foundation by providing the students with a quantitative analysis of ionic currents underlying the membrane properties of particular neurons. In the third module, the students integrate their physiological knowledge with an embryological analysis of the way in which identified neurons are generated, differentiate and establish stereotyped patterns of synaptic connectivity. To augment the teaching function of the Leech Course, the co-directors propose to: (1) offer the course every summer; (2) facilitate the learning experience by reorganizing the schedule in response to student feedback; (3) assure that there is a continual influx of fresh approaches and insights by involving a larger number of young faculty members in this field; and, (4) introduce a coordinated program for the recruitment and selection of students from underrepresented racial/ethnic groups. The Leech Course is expected to be composed of approximately two-thirds U.S. students.

GRANT NUMBER: 1 R25 MH59472-01
PROJECT DIRECTOR: BURRIS, JOHN E, PHD
ORGANIZATION: MARINE BIOLOGICAL LABORATORY
WOODS HOLE, MASSACHUSETTS
TRAINING AREA: NEURAL SYSTEMS AND BEHAVIOR
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION:(Abstract adapted from applicant's abstract): Since 1978, the Neural Systems and Behavior (NS&B) summer course at the Marine Biological Laboratory has been providing intensive training in the concepts and methodology of modern behavioral neurobiology to outstanding pre- and postdoctoral students during early stages of their research careers. Twenty students are immersed for 8 weeks in lectures and laboratory work under the mentorship of some of the best teachers and researchers in the field, augmented by invited seminar speakers and Scholars-in-Residence. This highly integrated and interactive format is rarely available during standard university training. Students come from diverse backgrounds including neuroscience, biology, psychology, medicine, mathematics, physics, and engineering. New Co-Directors who assumed leadership of the course in 1995 have maintained the traditional core strengths of NS&B while incorporating new exercises and faculty. Extensive hands-on laboratory training with state-of-the-art equipment includes a variety of invertebrate and vertebrate preparations. The laboratory section, which is divided into four 2-week "Cycles", begins with fundamental electrophysiological techniques. Students then move on to investigate neuromodulation and reconfiguration of neural circuits, the reception and processing of auditory information studied in three complementary preparations, and learning and memory studied at the behavioral, neuronal population and synaptic levels. In addition to conventional electrophysiological techniques, students learn patch and whole-cell recordings, quantitative behavioral analyses of normal and "knockout" mice, multi-electrode recordings from freely-behaving rodents during spatial learning, in situ intracellular recording from vertebrate brain, brain slice recordings, computational approaches to complex systems, computerized data acquisition and analysis, cell culture recordings, and neuroanatomical techniques including in situ hybridization. Course evaluations from past and recent NS&B alumni/ae suggest that the course is highly effective in preparing students for creative and productive research careers in neurobiology and behavior. Funding is requested to this unique training opportunity in its present form.

GRANT NUMBER: 2 T32 MH19734-06
PROJECT DIRECTOR: BURTON, LINDA M, PHD
ORGANIZATION: PENNSYLVANIA STATE UNIVERSITY
UNIVERSITY PARK, PENNSYLVANIA
TRAINING AREA: RESEARCH TRAINING IN DIVERSITY & FAMILY PROCESS
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This proposal seeks 5 years of support for a multi-site postdoctoral training program focusing on the development of research competencies related to collaborative, multi-disciplinary studies of diversity (socioeconomic, ethnic/racial, structural), family process, and child/adolescent mental health. The proposal builds on two earlier, highly successful NIMH training grants. The program emphasizes the need for comparative, multiple investigator research on four highly relevant themes: (1) the impact of families' socioeconomic trajectories on family processes (e.g., parenting) and mental health outcomes; (2) the relationship between community context, family processes, and developmental outcomes for children; (3) the prevalence of mental illness among children as it related to family networks and service utilization; and (4) the role of culture and family structure in developing effective family and child mental health interventions. Each of the program training faculty currently has funded, longitudinal family research underway that, taken together, represents the full spectrum of state-of-the-art family research methods and theory on diverse populations. These projects, along with educational opportunities available at each investigators institution and collaborative research and training activities with research partners at historically minority colleges and liaisons from other family-related network/consortia, 'will provide a rich training environment for a total of 16 trainees. Trainees will be recruited nationally and selection will be based on demonstrated potential for research excellence. Special steps will be taken to locate and recruit underrepresented minorities. Trainees will complete a 3-year program that begins with an intensive 8- week summer workshop series and weekly seminar taught by the applicants for this proposal. After this summer experience, trainees will each go to a single research site; however, they will be involved in a collaborative program of research with a training faculty member at a second site which they will visit twice each year. Trainees 'will plan a program of research and educational activities, appropriate to their needs, with the training faculty. They will be evaluated based on their success in meeting the objectives of this plan. Research training will follow a step-by-step process aimed at: (1) improving the trainee's family research skills as they relate to diversity; (2) developing joint publications with faculty mentors; and (3) the submission of a research proposal related to diversity, families, and mental health intended to hind the trainee's research after completion of the program.

GRANT NUMBER: 5 T32 MH19728-07
PROJECT DIRECTOR: CACIOPPO, JOHN T, PHD
ORGANIZATION: OHIO STATE UNIVERSITY
COLUMBUS, OHIO
TRAINING AREA: TRAINING PROGRAM IN SOCIAL PSYCHOLOGY
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This application is for the social psychology graduate training program at Ohio State that has been providing the nation with new Ph.D.'s for over 30 years. It is guided by a group of full time faculty whose primary affiliation is with the program. Societal problems derive more and more from the dilemmas and temptations faced by typical people in typical settings. Drug use, employee absenteeism, domestic violence, poor diet choices, smoking, and drinking and driving all illustrate the kinds of concerns addressed by theory and research in social psychology. The social program at Ohio State offers its students research training enabling them to tackle such problems throughout their research careers. The program has four features that distinguish it from other training centers in social psychology. First, the program adopts a multi-level integrative approach toward graduate training. Problems in society are multiply determined, and their solutions must be based on that recognition. Pre- and postdoctoral training components are designed to equip students with the conceptual and methodological tools required to examine social psychological phenomena from multiple levels of analysis. Second, the program is

organized around five core principles: scientific competence, scholarship and scientific integrity, personal responsibility, priority setting, and the sovereignty of each student. These principles are operationalized through the structure of coursework, research activities, and mentoring in the program. Third, the program provides an integrated and synergistic relationship between training in basic and applied research. Through their research involvement, students learn both that there is nothing so practical as a good theory and that nothing fosters a good theory more than a perplexing practical problem. Fourth, and finally, the quality and collegiality of both students and faculty distinguish the program. Faculty and students have high visibility as well as are seminal contributors to the field. A training grant (that supports both predoctoral and postdoctoral trainees) for the social psychology training program will substantially facilitate the program's ability to contribute scholars to the field with the multi-level analytic skills needed to address the practical problems faced by individuals in today's society.

GRANT NUMBER: 5 T32 MH18911-11
PROJECT DIRECTOR: CAINE, ERIC D, MD
ORGANIZATION: UNIVERSITY OF ROCHESTER, MEDICAL CENTER
ROCHESTER, NEW YORK
TRAINING AREA: NIMH INSTITUTIONAL NATIONAL RESEARCH SERVICE AWARD
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This is an application for our Institutional National Research Service Award, based in the Program in Geriatrics and Neuropsychiatry of the Department of Psychiatry, and the Departments of Neurobiology and Anatomy, Pathology (Neuropathology Unit), and Family Medicine of the University of Rochester Medical Center. Ours is a multidisciplinary training program with the aim of preparing psychiatrists, psychologists, and neuroscientists for academic research careers focusing on geriatrics, neuropsychiatry, neuropsychology, clinical psychology, and laboratory neuroscience. We have been most successful recruiting highly qualified candidates, and they join other trainees who are being prepared in our programs. Our training is based on the establishment of a committed mentor-trainee relationship, and the formulation of individually tailored programs that involve fellows in current research and support the development of their own protocols. Fellows are funded for 2-3 year periods, most often for three years. There are core seminars and research meetings, and fellows are provided with opportunities to attend other seminars depending upon specific training needs. Fellows who complete our training programs have gone on to productive academic careers.

GRANT NUMBER: 5 T32 MH16846-17
PROJECT DIRECTOR: CALLAHAN, JAMES J, PHD
ORGANIZATION: BRANDEIS UNIVERSITY
WALTHAM, MASSACHUSETTS
TRAINING AREA: MENTAL HEALTH SERVICE RESEARCH TRAINING PROGRAM
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The goal of the program, first funded by NIMH in 1981, is to train mental health practitioners and clinicians in the tools and techniques of mental service research. The special focus of the Heller School program has been to recruit practitioners from the field and give them the training they need to be successful researchers. Trainees usually have a Master's degree in a human service area and a number of years of experience. The value of this approach, as distinct from recruiting trainees right out of undergraduate education, is that the trainees have committed already to the field of mental health or a related human service profession. On-the-job experience has led them to inquire, observe, and generate an interest in research. The task of the Heller program is to convert students who like to "help people", but who are not quantitatively trained, into skilled researchers. No other services research training program has articulated and pursued this task. Thus the program fills a unique niche in NIMH's mental health services research training program. The proposed program will train

predoctoral trainees and post-doctoral trainees in mental health service research utilizing a multi-disciplinary program grounded, a) in the application of sociological, economic, psychological and political science perspectives to the analysis of mental health problems; and, b) in the use of quantitative and qualitative methods of scientific inquiry to systems, services and organizations in the mental health sector.

GRANT NUMBER: 5 T32 MH19951-04
PROJECT DIRECTOR: CAREW, THOMAS J, PHD
ORGANIZATION: YALE UNIVERSITY
NEW HAVEN, CONNECTICUT
TRAINING AREA: A MULTIDISCIPLINARY ANALYSIS OF LEARNING AND MEMORY
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The Department of Psychology at Yale University has established a psychobiology training program for predoctoral and postdoctoral students. The objective of the program is for students to become leaders in research and innovators in behavioral neuroscience, especially in the areas of learning and memory. At a broad level, the emphasis will be on providing students with sufficient training to discover the relationships between brain function and behavior through both experimental and theoretical/computational approaches. The program will emphasize training at several levels of analysis: (a) an experimental analysis of behavior through the use of procedures developed to study both associative and non-associative learning phenomena in animals; (b) a systems level of analysis using methodologies for identifying brain structures and neuronal circuits involved in a form of learning; (c) a cellular level of analysis using methodologies for identifying the individual elements or populations within these circuits and the cellular mechanisms of neuronal signaling and neuronal plasticity; and, (d) a theoretical/computational level that uses strategies and methodologies for developing theoretical/computational models of learning that emphasize the integration of findings across these several levels of analyses. Such an approach is critical for identifying the features of the nervous system, at each level, that are important in endowing the system with the learning capacities that are observed in behavior and for demonstrating that the proposed interactions of the identified neural elements can in fact produce the phenomena to be explained. The predoctoral students will be trained within the general structure of Yale's Psychobiology Doctoral Program. The Program Director plans to fund each postdoctoral trainee for two years. The program will admit trainees who demonstrate strong interest in a research career in behavioral neuroscience and who have received excellent training and prior experience. The participating faculty will include several core faculty members, all with active research programs focusing on the psychobiology of learning and memory. Six of the program faculty have primary appointments in the Psychobiology division within the Department of Psychology, one has a primary appointment in the Department of Psychiatry and a joint appointment in the Department of Psychology. In addition, this core group has excellent ongoing interactions with colleagues in the neuroscience, biology, computer science, and engineering programs at Yale.

GRANT NUMBER: 1 R25 MH58879-01
PROJECT DIRECTOR: CARSKADON, MARY A, PHD
ORGANIZATION: EMMA PENDLETON BRADLEY HOSPITAL
PROVIDENCE, RHODE ISLAND
TRAINING AREA: SLEEP AND CHRONOBIOLOGY SUMMER RESEARCH APPRENTICESHIP
(UNDERGRADUATE/PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The sleep and chronobiology summer research apprenticeship aims to foster mental health research education primarily for undergraduate students, but also for young pre- and postdoctoral scientists. Thus, the program provides 15 undergraduate students with an intensive research and academic experience in a human sleep and chronobiology research laboratory, helps support a summer teaching assistantship for a predoctoral student, and provides opportunities for young scientists to serve as visiting

scholars/role models. Sleep and circadian rhythms research have a longstanding history of support from the NIMH, and they continue to be areas of importance to the nation's mental health research agenda. For example; the National Center for Sleep Disorders Research has recently increased attention to these issues, producing an escalating need for trained scientists. Although undergraduate education programs by their very nature do not have immediate impact on needs for trained investigators, mental health researchers who understand basic principles underlying sleep and circadian rhythms will continue to be needed on a long-term basis. Applicants are recruited from Brown University (approximately 50%), the Sleep Research Society trainee network, the Venture Consortium of 8 liberal arts colleges and universities, and minority recruitment is targeted through the Leadership Alliance. Trainees participate for 13 weeks, including 2 weeks of intensive lab skills training, one week attending the annual meeting of the sleep professional societies (APSS), a 10-week research apprenticeship in an ongoing study of sleep and circadian rhythms in adolescents (stipends supported by a research grant), seminar series with young scientists, and research paper presented at a concluding colloquium. This grant will support the academic and career development aspects of the research apprenticeship through tuition and fees to Brown Summer Studies, which gives trainees access to all of Brown's academic facilities (e.g., libraries, computer clusters, writing tutors); attendance at the annual APSS meeting, which exposes students to other research areas and sleep trainees; visiting young scholar seminar series, where trainees interact with young scientists who themselves benefit from the tangible acknowledgement of their career choices. In summary, the sleep and chronobiology summer research apprenticeship program supports mental health research education by providing to undergraduate students research training in this field of behavioral science, an intensive hands-on experience in a working laboratory, and exposure to role models for careers in research.

GRANT NUMBER: 5 T32 MH18825-12
PROJECT DIRECTOR: CHASE, MICHAEL H, PHD
ORGANIZATION: UNIVERSITY OF CALIFORNIA, LOS ANGELES
LOS ANGELES, CALIFORNIA
TRAINING AREA: MULTI-SITE TRAINING PROGRAM FOR BASIC SLEEP RESEARCH
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This application is for a program of predoctoral and postdoctoral training entitled Multi-Site Training Program for Basic Sleep Research. The objective of the Training Program is to establish a coterie of outstanding young scientists who can advance knowledge of the fundamental properties of the sleeping brain. To achieve this objective, the Training Program will capitalize on the combined strengths of six distinguished universities and their basic sleep research laboratories. Under the auspices of the Training Program, the faculty will pool their resources and provide training in molecular, cellular, systems, and behavioral aspects of sleep research as well as address clinically relevant areas of interest. Trainees will be able to carry out their research in the laboratory of any member of the Training Program or in the laboratory of an investigator who is not a member of the Training Program, but is qualified to serve as the trainee's mentor. Trainees are also encouraged to coordinate their search between laboratories. Thus, a vast array of resources will be available to the trainees. Essentially, the Training Program will function as a "University Without Walls" by providing multidisciplinary and interdisciplinary training throughout the United States. Support is requested for both predoctoral and postdoctoral trainees yearly. Predoctoral trainees will be required to take a series of courses at UCLA under the auspices of the UCLA interdepartmental Neuroscience Ph.D. Program. In addition, the Training Program has developed specialized courses for the trainees, such as the Neurobiology of Sleep and the Biology of Circadian Rhythms and specialized programs, such as an annual Summer Sleep Workshop. Upon successful completion of the Training Program, predoctoral trainees will receive a doctorate degree in neuroscience. Postdoctoral trainees will be provided with research training and coursework and will be especially encouraged to learn any skills and techniques in the neurosciences. Postdoctoral trainees may also carry out research in the laboratory of any faculty member of the Training Program or with any other qualified investigator. The Multi-Site Training Program for Basic Sleep Research is the only program in the nation specifically designed to provide training in basic sleep research and, as such, the program director believes it is critically important. At the present time, basic sleep studies are on the verge of extinction because there are only a handful of basic sleep research laboratories in the United States and none can provide interdisciplinary training in sleep and modern neuroscience. Consequently, without this Training Program,

there would be no comprehensive mechanism to train new investigators especially with an emphasis on modern neuroscience thought and techniques within the context of sleep research. It is expected that those individuals who have completed the Training Program will be in a position to command a place of high respect among the nation's young neuroscientists and compete successfully for key positions in academic institutions.

GRANT NUMBER: 5 T32 MH18387-12
PROJECT DIRECTOR: CHASSIN, LAURIE, PHD
ORGANIZATION: ARIZONA STATE UNIVERSITY
TEMPE, ARIZONA
TRAINING AREA: RESEARCH TRAINING IN CHILD MENTAL HEALTH/ PRIMARY
PREVENTION
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This application seeks support for our training program in prevention research through the Arizona State University Preventive Intervention Research Center (ASU PIRC). The program has provided training to 10 pre-doctoral and 15 post-doctoral students since its original funding by NIMH in 1987. We train researchers to specialize in the primary prevention of negative mental health outcomes among high-risk children and adolescents. Theoretically, we assume that preventive interventions are best derived from a thorough empirical understanding of the acquisition of targeted outcomes. Within this acquisition-oriented framework, we emphasize a stress and coping model that examines both risk and protective factors among children who are experiencing major life stressors. We provide training in the generative, executive, and methodological research that is necessary for the multi-faceted domain of prevention science, including extensive direct experience with ongoing preventive intervention trials. The primary training site is the ASU PIRC, in which collaborative research teams study the design, implementation, evaluation, and dissemination of preventive interventions for children experiencing major life stressors, as well as the critical methodological and statistical issues underlying such studies. Faculty from clinical, social, and developmental psychology, family studies, statistics and public affairs deliver training through a combination of research apprenticeships, an ongoing training seminar, and formal coursework. This application requests support for postdoctoral and predoctoral fellows. Postdoctoral fellows will be recruited from component disciplines such as clinical, social, and developmental psychology, social ecology, family studies, nursing, and statistics. Predoctoral fellows are recruited from clinical, social or developmental psychology. The duration of training is a two-year period.

GRANT NUMBER: 5 T32 MH20017-02
PROJECT DIRECTOR: COHEN, JONATHAN B, PHD
ORGANIZATION: HARVARD UNIVERSITY, MEDICAL SCHOOL
BOSTON, MASSACHUSETTS
TRAINING AREA: PHD TRAINING IN NEUROSCIENCE
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This application for a jointly sponsored predoctoral training program in neurosciences will represent the major source of support for students in the Ph.D. Program in Neurosciences at Harvard University. The goals of this interdepartmental Ph.D. program, which was established in 1981, are 1) to organize within a single training faculty the neuroscientists at Harvard Medical School, its affiliated hospitals, and Harvard College; in order 2) to train research scientists/teachers who have a broad background in neuroscience and who are interested in mental health and diseases of the nervous system to carry out original and rigorous research in important areas of neuroscience. In the first two years trainees complete a sequence of core courses ranging from cell and molecular neurobiology to systems neuroscience, as well as collateral courses selected from cell and molecular biology, immunology, statistics, and other subjects appropriate to individual interests.

Students rotate through three different laboratories. Full time thesis research follows the course work, laboratory rotations, and qualifying exams. Students are also involved in other training activities including journal clubs, seminars, and data presentation. There are currently 72 graduate students in the program. The total faculty includes 94 members, of whom 54 who are currently most actively involved in graduate education are Training Mentors on the present grant. Considerable effort has gone into making this program a highly interactive group with extensive formal and informal contacts between students and faculty.

GRANT NUMBER: 5 T32 MH19953-03
PROJECT DIRECTOR: COHEN, SHELDON, PHD
ORGANIZATION: CARNEGIE-MELLON UNIVERSITY
PITTSBURGH, PENNSYLVANIA
TRAINING AREA: PRE AND POST-DOCTORAL TRAINING IN HEALTH PSYCHOLOGY
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): High risk behaviors, poor medical decision making, lack of adherence to medical regimens, deterioration of quality of life in response to chronic and life- threatening illness, and the impact of psychological distress and psychiatric disorder on the onset and progression of physical illness are all central issues in contemporary health care. These are also the topics of health psychology. This application requests funding for a pre- and postdoctoral training program that will prepare individuals for careers in health psychology. The program draws on an outstanding faculty in two (geographically adjacent) universities and four departments to provide integrated interdisciplinary training. Current funding for the members of the training faculty includes grants from NIH and from other sources. The members have trained 47 predocs and 24 postdocs in the last 10 years (not including current trainees) and many of these trainees have become established contributing health scientists. Predoctoral trainees currently receive degrees in biobehavioral, clinical, cognitive or social psychology, with a specialization in health psychology. Postdoctoral students include Ph.D.'s in behavioral sciences and M.D.'s. A variety of experiences are represented in the training program, including formal courses, seminars, and research programs involving humans and non-human primates. Trainees have the opportunity to participate in a primary research program while becoming knowledgeable about the other areas of health psychology research. Research training occurs in the context of the development and systematic examination of psychological and biological theory. Each trainee is required to master theoretical and substantive literatures, and research methods in health psychology. They are also required to specialize in two of four specialty areas: psychophysiology, psychosocial processes in disease, medical decision making, and psychosocial interventions. Upon completion of training, predoctoral trainees in cognitive, social, and psychobiology subspecialties will be prepared for placement as researchers in academic medicine or psychology departments. Following their internships, clinical students will be prepared for placement as researchers in academic medicine or psychology departments. Following their internships, clinical students will be prepared for conducting health psychology research in clinical or academic settings. Adequate laboratory space, office space, secretarial support, computer facilities, and libraries are available for the trainees.

GRANT NUMBER: 1 T34 MH19978-01
PROJECT DIRECTOR: COHN, LAWRENCE D, PHD
ORGANIZATION: UNIVERSITY OF TEXAS EL PASO
EL PASO, TEXAS
TRAINING AREA: CAREER OPPORTUNITIES IN RESEARCH (COR) TRAINING
(PREDOCTORAL)

DESCRIPTION (Adapted from Applicant's abstract): This revised proposal addresses the four concerns raised by reviewers of the original application. Specifically, the current application details (1) the accomplishments of federally funded mentoring programs at the University of Texas at El Paso (in particular, the MARC program), (2) proposes a

set of activities and strategies for having trainees discuss (and potentially resolve) their individual and collective needs, (3) expands the number of sociology mentors participating in the program, and (4) describes how the objectives and content of the proposed program have been shaped by meetings with (a) several proposed mentors and (b) discussions with directors of similar federally funded mentoring programs at UTEP. The proposed training program provides extensive research and educational experiences to ten undergraduate social science majors from underrepresented minorities. The goal of the program is to prepare academically talented students to pursue doctoral training in scientific fields related to mental health. Components of the program include two years of faculty mentoring within a research lab, a one semester course introducing trainees to literature searches and statistical procedures underlying quantitative reviews (meta-analysis), preparation of an honor's thesis, and a summer research internship. Additional educational experiences include attendance at scientific conferences, drafting of research abstracts and poster presentations, and participation in special colloquia and seminars. In toto, the skills and educational accomplishments resulting from this program should make trainees highly competitive for entry into graduate programs.

GRANT NUMBER: 5 T32 MH15755-20
PROJECT DIRECTOR: COLLINS, W ANDREW, PHD
ORGANIZATION: UNIVERSITY OF MINNESOTA, TWIN CITIES
MINNEAPOLIS, MINNESOTA
TRAINING AREA: CHILD DEVELOPMENT
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The purpose of the proposed program is to train predoctoral and postdoctoral students in child development research. Students will concentrate efforts on various topics, each dealing with behavioral adaptation in childhood and related developmental processes. Research in child development is essential to a better understanding of child mental health and those disorders of adulthood having developmental antecedents. Current societal conditions have an increasingly negative impact on children's development, thus creating an urgent need for information dealing with both normative and pathological aspects of behavioral development. The proposed program is an outgrowth of training efforts in the Institute of Child Development supported by NIMH for more than 35 years and includes a variety of didactic components as well as a research apprenticeship at the predoctoral level. Postdoctoral training encompasses a series of coordinated program activities as well as bench work in social and emotional processes, language development, cognitive development and neuroscience, psychobiological processes, and perceptual development. Predoctoral trainees entering the program will have completed baccalaureate studies in psychology or a related area and occasionally will have had some graduate work. Trainees represent the most outstanding students in a competitive program. Postdoctoral trainees will enter the program having had training in specialties other than child development or developmental psychology or a desire to expand training to encompass one of several specialties linking developmental psychology to such areas as psychopathology, cognitive science neuroscience, and interpersonal relationships research. The main training facility is the Institute of Child Development, a regular academic department of the University of Minnesota. The faculty consists of 16 professors in this department, whose work ranges across the entire discipline. The Institute building includes about 50,000 sq. ft. of space. Ongoing collaborative research is also conducted in laboratories in the Departments of Pediatrics, Laboratory Medicine, Psychiatry, Educational Psychology, and Kinesiology.

GRANT NUMBER: 2 T32 MH17104-16
PROJECT DIRECTOR: COTTLER, LINDA, PHD
ORGANIZATION: WASHINGTON UNIVERSITY
ST. LOUIS, MISSOURI
TRAINING AREA: PSYCHIATRIC EPIDEMIOLOGY & BIOSTATISTICS
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The Department of Psychiatry at the Washington University School of Medicine (WUMS) has a long-standing tradition of psychiatric epidemiological research dating from the 1950's with Eli Robins as Head. Throughout the last 40 years, the Department's training has been interdisciplinary. Psychiatrists, sociologists, psychologists, social workers, epidemiologists, geneticists, mathematicians, and economists have conducted epidemiological research in the Department. This tradition of fostering collaboration among disciplines has guided the approach to the training of psychiatric epidemiologists. The NIMH Training Program in Epidemiology and Biostatistics is now in its ninth year. During the nine years that the program has been in operation, 2 predoctorals and 17 postdoctorals have completed training; 4 trainees are still enrolled. This proposal hopes to continue the objectives established, which are to provide postdoctoral fellowships to those holding the Ph.D. or M.D. degree with a strong interest in psychiatric epidemiological research. The specific goals and characteristics of the training program are: (1) to establish a firm foundation and research expertise in the trainee's chosen field of specialization; (2) to assure a broad understanding of psychiatric epidemiology, together with a good working knowledge of genetic and neurobiologic aspects of psychiatric disorders and their comorbidity; (3) to generate sufficient knowledge in at least one area, in addition to the chosen focus, to promote collaborative efforts in future research careers; (4) to expose trainees to teaching; (5) to develop researchers with finely honed research skills and an ability to critically evaluate and make judgments regarding their own research and that of others.

GRANT NUMBER: 5 T32 MH18837-10
PROJECT DIRECTOR: CREWS, DAVID P, PHD
ORGANIZATION: UNIVERSITY OF TEXAS, AUSTIN
AUSTIN, TEXAS
TRAINING AREA: TRAINING PROGRAM IN NEUROBIOLOGY & BEHAVIOR
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This is a training program at the University of Texas at Austin focusing on interdisciplinary training in the biological bases of behavior. A small select group of behavioral neuroscientists from the Psychology and Zoology departments of the University have joined together to provide training with special emphasis on integrating physiological, developmental, ecological, and evolutionary determinants of behavior. This broad-based approach combines unique, yet fundamental, training in the physiological and psychological sciences. The training program has three primary features. First, there is training in how to conduct investigations in both field as well as laboratory settings. Naturalistic field studies provide clues to the functional links between ecology, physiology, and behavior. Laboratory studies allow for the greater control that is required for the study of underlying mechanisms. From both come animal model systems that aid in the understanding of mental health disorders in humans. Second, we emphasize that only by using an integrative approach is it possible to discover the relationships between the development, physiology, ecology, and evolution of behavior. In this way, the relations between different levels of biological organization are illuminated. Third, students are encouraged to become proficient with contemporary analytic methods needed to exploit successfully different levels of scientific inquiry. All trainees are required to take three didactic courses (neuroscience, behavioral physiology, and human neuropsychology). Throughout their tenure (4 years for predoctoral trainees and 2 years for postdoctoral trainees), trainees attend weekly seminars in the Psychology and Zoology departments. Seminars include summaries of state-of-the-art knowledge in various areas, laboratory demonstrations of new techniques, and discussions of ethical issues in research training. Trainees are evaluated for their steady progress in scholarship and research in quarterly meetings of the training faculty. A qualifying and a dissertation examination are required of all predoctoral trainees. All of the research

service facilities of the Psychology and Zoology departments (computer specialists and electronics and machine shops) are available to the trainees, as well as the well-equipped laboratories of the training faculty, all of whom are recognized authorities in their fields, as evident by sustained productivity in research, invitations to national and international symposia, continual research funding from federal agencies, and extensive experience in providing research training. All of the laboratories comply with NIH requirements.

GRANT NUMBER: 5T32 MH15801-20
PROJECT DIRECTOR: CROCKER, JENNIFER S, PHD
ORGANIZATION: UNIVERSITY OF MICHIGAN AT ANN ARBOR
ANN ARBOR, MICHIGAN
TRAINING AREA: SOCIAL PSYCHOLOGY
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The major goal of this program is to increase the numbers of research psychologists who are from and/or who have research interests directed at underrepresented racial/ethnic groups. This application seeks support for a Research Training grant that has been funded by NIMH for the past 18 years. The present application proposes an expansion of the current training in predoctoral traineeships in psychology, and additional traineeships designated specifically for AIDS research training. We have supported a total of 184 trainees of whom 101 (55 percent) earned their doctoral degrees. For trainees entering prior to 1985, the rate of degree completion is 94 percent. Only 11 trainees have abandoned pursuit of their degree for a 6 percent attrition rate. Trainees are in top research psychology training programs in the country, and work with mentors who are among the most productive in their fields. The program has developed a detailed tracking system for all trainees and proposes to augment this communication network with enhanced electronic capabilities including an Internet MFP Homepage, email and Listserve networks. Annual activities at the APA Convention and regional psychological association programs will continue to be sources of professional development and mentoring for trainees. At the APA Convention, we specifically conduct new trainee orientations and sponsor a symposium for new Ph.D.'s to present their dissertation research. We propose to add symposia and workshops on AIDS research, as well as seminars on the responsible conduct of research in psychology to our convention activities. We expect that with increased funding support, and continued strong application rates, we will continue to contribute to the development of ethnic minority psychologists who have a strong research emphasis, and to the cumulative body of research that explores psychosocial mechanisms of behavior in these ethnic/racial populations.

GRANT NUMBER: 5 T32 MH14620-23
PROJECT DIRECTOR: CROWE, RAYMOND R, MD
ORGANIZATION: UNIVERSITY OF IOWA, COLLEGE OF MEDICINE
IOWA CITY, IOWA
TRAINING AREA: POSTDOCTORAL FELLOWSHIP IN PSYCHIATRIC GENETICS
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): Psychiatric genetics is a rapidly developing research discipline in the broader field of mental health research, yet relatively few programs exist to prepare young scientists for a career in this highly specialized area. This application is for a postdoctoral fellowship in psychiatric genetics to produce scientists who will engage in productive research in psychiatric genetics. It is open to applicants with a doctoral level degree; over the years approximately half of these have been M.D.'s and the others have held Ph.D.'s in health-related disciplines such as psychology and human genetics. The program admits trainees for a training period that can range from one to three years. The core of the training is a research project under faculty supervision, and the training faculty represent a wide range of research interests, including clinical genetics epidemiology and statistics, and molecular genetics. The research training is supplemented as needed by didactic courses at the University, tutorials with faculty

members, seminars taught in the Psychiatry Department, and by a psychiatric genetics seminar held for the trainees of this program. The program is administered by the Program Director with the assistance of other members of the Steering Committee: Dr. Vieland, representing genetic epidemiology, and Dr. Devor, representing molecular genetics. Trainees who complete the program are qualified to become independent investigators in psychiatric genetics.

GRANT NUMBER: 5 T32 MH19119-09
PROJECT DIRECTOR: D'AUNNO, THOMAS, PHD
ORGANIZATION: UNIVERSITY OF CHICAGO
CHICAGO, ILLINOIS
TRAINING TITLE: MENTAL HEALTH SERVICES RESEARCH TRAINING PROGRAMS
(PREDOCTORAL)

DESCRIPTION: (Adapted from applicant's abstract): The School of Social Service Administration of the University of Chicago is requesting support for a Mental Health Services Research Training Program. The purpose of the program is to provide social work researchers with substantive knowledge and methodological skills which will enable them to conduct systematic studies that can advance knowledge in the area of mental health services. Because social workers play a major role in planning and providing mental health services, and because they understand the multiple levels of influence on human services problems, well-trained social work researchers are likely to make substantial contributions to our knowledge in this area. The proposed program will offer three years of training for doctoral students who already have an MSW or equivalent degree. The distinctive characteristics of the training program are: 1) the social work perspective, which focuses on understanding the interactive influence of multiple systems (e.g. individual, family, organizational, economic, political) on the delivery and utilization of mental health services, with special attention to the provision of effective services to disadvantaged groups; 2) the focus on services to people with severe mental illnesses; 3) the focus of services in a complex urban environment; 4) the provision of research practica in which trainees gain hands-on supervision research experience in well-designed and executed studies addressing services for individuals with severe mental illness; 5) the balance between a structured curriculum and opportunities for trainees to pursue individualized study. The curriculum includes required substantive, research methods, and statistics courses; required research practicum and seminar; elective courses; a qualifying examination; and dissertation research focused on a mental health services question. It is expected that students will have diverse interests within the mental health services area and will focus their research on a variety of service dimensions (e.g. program effectiveness, financing, organization, etc.). The program capitalizes on this diversity of interest in that all students gain working knowledge of the multiple systems affecting mental health services and the various methodological issues that arise in designing and conducting research in different areas. The scope of the program has been expanded from the previous grant period to include a focus on mental health services for the children and adolescents with severe mental illness.

GRANT NUMBER: 2 T32 MH18931-09
PROJECT DIRECTOR: DAVIDSON, RICHARD J, PHD
ORGANIZATION: UNIVERSITY OF WISCONSIN, MADISON
MADISON, WISCONSIN
TRAINING AREA: TRAINING PROGRAM IN EMOTION RESEARCH
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Applicant's abstract): We seek a five year renewal of our training grant on emotion research. In this renewal, we propose to make major changes to the program structure. In the past, the program was a multi-institution post-doctoral program with trainees spending their first year in Wisconsin and then moving on to another institution to work in the laboratory of their mentor for the second and third years. At the time this proposal was last competitively renewed, we suggested that no single institution had the faculty strength to mount a training program in

emotion. However, much has changed at Wisconsin over the past five years. Several new faculty with primary research interests in emotion have been added and Wisconsin is now home to one of the NIMH-funded Centers for Behavioral Science Research, with ours focused on Affective Science. Thus, we now seek to develop a training program at Wisconsin that will focus on three major themes in contemporary research on emotion: 1. Personality, temperament and individual differences: Lifespan developmental, genetic, cognitive and biological approaches; 2. Affective neuroscience; and 3. Emotion and psychopathology. We have 21 program faculty, from five different academic departments, with Psychology as the primary department. We seek funds for 8 new predoctoral trainees each year and 2 new post-doctoral trainees. Pre-doctoral trainees will be supported for two years and post-doctoral trainees for three years. Major elements of the training experience include: a year-long seminar in emotion theory and research, which will include presentations by select program faculty; a Spring seminar each year associated with the Wisconsin Symposium on Emotion, an annual event at Wisconsin that brings 4-5 outside speakers to campus for a meeting on a specific topic in emotion research; participation in periodic meetings of the NIMH-supported Wisconsin Center for Affective Science; participation in monthly emotion groups held at different faculty members' homes once each month; and a two-day annual workshop featuring presentations by the trainees and a keynote speaker from the outside. We believe this program will provide unique, interdisciplinary training within a single institution and will effectively prepare the next generation of affective scientists.

GRANT NUMBER: 5 T32 MH15169-20
PROJECT DIRECTOR: DAY, NANCY L, PHD
ORGANIZATION: WESTERN INSTITUTE/CLINIC PSYCHIATRIC
UNIVERSITY OF PITTSBURGH AT PITTSBURGH
PITTSBURGH, PENNSYLVANIA
PROJECT TITLE: PSYCHIATRIC EPIDEMIOLOGY TRAINING PROGRAM
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The Psychiatric Epidemiology Training Program emphasizes the methodologies of epidemiology and biostatistics, focusing on the application of these methods to research on psychiatric disorders. The philosophy of the Training Program is that students must be thoroughly grounded in the techniques of epidemiology and biostatistics before they can apply this knowledge to the exploration of the distribution and etiology of psychiatric disorders. This training is accomplished by coursework in epidemiology and statistics, and through courses on psychiatric epidemiology that were designed specifically for the Training Program. An equally important part of the training experience is the opportunity to work on research projects with faculty mentors who are active researchers in psychiatry and epidemiology. This is an application for a training program that began in 1977. Since 1980, this Training Program has had 24 predoctoral students. All but one has remained in academia and research. In the same time period, 16 postdoctoral fellows were trained. Fourteen have remained in research and academia, and all have academic appointments; 8 of these are now at the rank of Associate Professor or Professor.

GRANT NUMBER: 5 T32 MH16880-18
PROJECT DIRECTOR: DE FRIES, JOHN C, PHD
ORGANIZATION: UNIVERSITY OF COLORADO AT BOULDER
BOULDER, COLORADO
TRAINING AREA: RESEARCH TRAINING--BIOLOGICAL SCIENCES
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The rapidly developing interdisciplinary field of behavioral genetics brings to bear the perspective of biochemical genetics, cytogenetics, developmental genetics, evolutionary genetics, molecular genetics, pharmacogenetics, and quantitative genetics upon behavioral research. It thus makes a

general contribution to the behavioral sciences that include knowledge about basic biological processes underlying mental and behavioral disorders. Its relevance to mental health arises from the fact that several of the most promising current areas of research within behavioral genetics pertain directly to mental health issues: specific cognitive abilities and disabilities, personality and neurotic disorders, behavioral problems of childhood, schizophrenia and affective disorders, and antisocial behaviors. The Institute for Behavioral Genetics (IBG) at the University of Colorado has been a leader in the area of behavioral genetics since its inception in 1967. Its faculty is distinguished and active in research. Facilities are available for work with experimental animals, primarily laboratory mice and nematodes, as well as with human subjects, and major research projects are now in progress. Research experience is an integral part of the training program. Complementing the intensive research training is a core program of courses to be undertaken by predoctoral trainees and other graduate students affiliated with the program. Postdoctoral training programs will be tailored to the individual, but the acquisition of competence in all areas of the predoctoral program, as well as active participation in supervised research, will be emphasized. The training program provides specialty training in behavioral genetics for predoctoral students who are also regular degree candidates in one of the academic departments of the University and for postdoctoral fellows who plan to become researchers and teachers in behavioral genetics.

GRANT NUMBER: 5 T32 MH18921-10
PROJECT DIRECTOR: DODGE, KENNETH A, PHD
ORGANIZATION: VANDERBILT UNIVERSITY
NASHVILLE, TENNESSEE
TRAINING AREA: LIFE-SPAN DEVELOPMENT OF NORMAL & ABNORMAL BEHAVIOR
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This program trains research scientists studying the development, life course, and prevention of abnormal behavior. The goal of the Vanderbilt University Developmental Psychopathology Research Training Program are: (a) to prepare trainees to become leading research scientists in the emerging interdisciplinary fields of developmental psychopathology and prevention science; (b) to provide a national forum for the maturation and evolution of these fields; and (c) to enhance the quality of research being conducted in these fields. During the first five years of funding, this program has been successful in achieving all three goals. All trainees that have been funded by this program to date currently hold university positions in research or research training. As a result of training, this trainee group has completed 73 articles, presentations at national conferences and papers. A forum for the field has been established through a Visiting Scholar program that has led to discussions, joint manuscripts, and collaborative research grant proposals. The quality of research at Vanderbilt University has been enhanced, as indicated by both faculty feedback and a five-fold increase in research grant funds awarded to program faculty during the past five years. This research has considered problems in three areas: externalizing disorders, internalizing disorders including emotion dysregulation, and disorders of cognition and learning. Funds are requested for three types of trainees: (a) advance predoctoral trainees in psychology; (b) postdoctoral trainees in psychology; and (c) post-residency trainees in psychiatry. The program emphasizes the inter-disciplinary nature of the field in that trainees come from diverse backgrounds and the faculty is represented from psychology, psychiatry, pediatrics, and sociology. The foundation of the program is apprenticeship-based research mentoring. All trainees participate in an ongoing proseminar attended by program faculty and renowned visiting scholars. Individualized programs are developed for trainees through coursework, workshops, and other experiences. The program is a joint venture of the Departments of Psychology and Human Development (Peabody College) Psychology (Arts and Science), and Psychiatry, administered through the John F. Kennedy Center for Research on Human Development at Vanderbilt University.

GRANT NUMBER: 5 T32 MH19554-07
PROJECT DIRECTOR: DONCHIN, EMANUEL, PHD
ORGANIZATION: UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN
CHAMPAIGN, ILLINOIS
TRAINING AREA: TRAINING IN COGNITIVE PSYCHOPHYSIOLOGY
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This proposal requests support for a training program in cognitive psychophysiology. The program provides training in the theoretical basis and in the methodology of cognitive psychophysiology to students and postdoctorals whose primary interest is in the areas of clinical, cognitive, engineering, and personality psychology. The program is embedded in a Department of Psychology of extraordinary breadth, with a structure and ethos that foster cross-disciplinary interactions. The program director augments the training offered by different departmental divisions by providing an opportunity for the students to apprentice in leading psychophysiological laboratories. He also assures that the students formal course work covers the diversity of areas that comprise cognitive psychophysiology. His program is unique in that there has developed in our department a community of psychologists, from many segments of the discipline, all of whom share an interest in and a commitment to the utility of psychophysiological approaches to their scholarly work. Support is requested for predoctoral and postdoctoral trainees. The traineeships allow their holders to concentrate on their research work with no distractions from teaching or other assignments.

GRANT NUMBER: 5 T32 MH18830-12
PROJECT DIRECTOR: DROTAR, DENNIS D, PHD
ORGANIZATION: CASE WESTERN RESERVE UNIVERSITY
CLEVELAND, OHIO
TRAINING AREA: RESEARCH TRAINING IN PEDIATRIC PSYCHOLOGY
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This application requests support for a program to train clinical psychologists to conduct outcome evaluation, descriptive, and applied research with pediatric populations that are at risk for developmental and emotional problems. Increasing numbers of children are affected by conditions such as prematurity, failure to thrive, and chronic physical illness that compromise their psychological adaptation and necessitate better scientific understanding of factors which affect their psychological development. This program addresses the need to train researchers by research with pediatric populations. The proposed program is characterized by an opportunity to work with diverse research populations, an interdisciplinary group of faculty mentors with experience and productivity in research with pediatric populations, a track record of graduates who are working in medical settings and currently contributing to pediatric psychology research, and making excellent early contributions. This program has developed methods of teaching and collaborative research supervision that have broad applicability to graduate level research training. The curriculum integrates biological and child developmental approaches with training in pediatric health care settings with patient populations. The proposed program is designed to develop trainees with the necessary skills to establish research programs in pediatric health care settings and to collaborate effectively with physicians in research. Graduates of the proposed program will make research contributions to pediatric psychology in academic, medical or psychology programs and will train researchers in this emerging field.

GRANT NUMBER: 2 T32 MH14276-24
PROJECT DIRECTOR: DUMAN, RONALD S, PHD
ORGANIZATION: YALE UNIVERSITY
NEW HAVEN, CONNECTICUT
TRAINING AREA: RESEARCH TRAINING – BIOLOGICAL SCIENCES
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The main purpose of the Biological Sciences Training Program in the Department of Psychiatry at Yale is to train postdoctoral fellows in biological and behavioral sciences relevant to mental illness and health. To attain this goal, the program recruits two groups of postdoctoral trainees: 1) psychiatrists, generally after completing two or three years of clinical residency; and 2) individuals with a Ph.D. degree in a basic science. To help fill a nationally recognized need, it is hoped to increase both the number of research psychiatrists with a grounding in basic biological sciences and to develop the interests of basic scientists in clinical problems as well as in interdisciplinary aspects of their own basic research. Thus, the overall aim is to promote cross-fertilization between basic researchers and individuals who are experienced clinically. Extensive research collaboration between faculty of the training program further contributes to interdisciplinary experience of the trainee. It is expected that trainees coming out of this program will be able to bridge the gap between basic and clinical neuroscience in psychiatry. There are 15 faculty members in the program consisting of both basic and clinical researchers. The program typically involves training in one primary discipline but usually includes direct or collaborative interactions with other disciplines. Laboratory training is offered in the following areas: neuroanatomy, histochemistry, neurochemistry, molecular biology, electrophysiology, and behavior. Clinical research training is offered in behavioral assessment, biological measurements, and imaging techniques. In addition to specific research training, there are courses in Clinical Neuroscience and Neuropharmacology as well as seminars and regular Workshops in which fellows present ongoing research to the entire group of faculty and trainees.

GRANT NUMBER: 5 R25 MH55733-14
PROJECT DIRECTOR: DUNBAR, JOSEPH, PHD
ORGANIZATION: WAYNE STATE UNIVERSITY
DETROIT, MICHIGAN
TRAINING AREA: COR HONORS HIGH SCHOOL RESEARCH EDUCATION
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This application requests support for the NIMH COR Honors Undergraduate Research Training and MHSSEP (Minority High School Science Education Program) Research Education Programs at Wayne State University. Since the goal of the NIMH COR/MHSSEP Program is to increase the number of underrepresented minority scientists partaking in biomedical and behavioral research, the W.S.U. NIMH COR/MHSSEP Program is specifically designed to stimulate the interest and motivation of minority students, at multiple levels of the academic pipeline, to pursue research careers in neurobehavioral and psychosocial disciplines related to mental health research and the treatment of mental illness and behavioral disorders. There are approximately 30 faculty from the Colleges of Science, Medicine, Nursing, Pharmacy, Liberal Arts and Social World who participate as Research Mentors and training faculty in the W.S.U. NIMH COR/MHSSEP Research Training and Education Program. The research trainees are Honors undergraduate junior and senior students (minimum G.P.A. = 3.0) majoring in psychology, biology, chemistry, nursing, pharmaceutical sciences, social world and sociology. The program goals are to: (1) increase the number of minority undergraduates receiving baccalaureate degrees who pursue advanced degrees leading to research careers in the biobehavioral, psychosocial and social work disciplines related to mental health; (2) provide an enriched interdisciplinary curriculum designed to foster and strengthen the interest and ability of undergraduate COR students who pursue a research career in mental health-related disciplines and to facilitate their entry into graduate programs; (3) offer multidisciplinary research training experiences at Wayne State and at extramural sites to familiarize students with biobehavioral and psychosocial research activities and to provide students with advanced research skills to conduct mental health-related investigations; (4) provide advising that will

familiarize students with institutions and graduate programs that are best suited to their needs. The W.S.U. NIMH/MHSSEP is designed to stimulate interest and motivation among minority high school students to pursue undergraduate majors and, ultimately graduate degrees, in biomedical and behavioral science disciplines related to mental health. The major programmatic focus is on providing students with science education enrichment activities and hands-on summer research experiences in biobehavioral and psychosocial research disciplines under the mentorship of the MHSSEP/ COR Training Faculty. MHSSEP students spend the equivalent of two years in the program by participating in both the Post-Junior Summer Research Apprenticeship (year 1) and the Pre-College Summer Research Apprenticeship (year 2). MHSSEP students are provided with advising and counseling components to facilitate their entry into college. The goals of the W.S.U. NIMH MHSSEP are to: (1) significantly increase the number of minority students from Detroit high schools who enter college and pursue undergraduate majors in mental health-related science disciplines; (2) promote the retention of MHSSEP students in science disciplines during their undergraduate training; and (3) to increase the persistence of MHSSEP students to obtain baccalaureate degrees to pursue graduate/professional degrees in science disciplines related to mental health research. Similarly, the Faculty Research Mentors in the NIMH MHSSEP Summer Research Apprenticeship Program are MIRDIP Faculty Investigators and/or serve as Faculty Participants in the NIMH COR Honors Undergraduate Research Training Program. Thus, a coordinated academic infrastructure and faculty network has been established at Wayne State University for research education, research training and research career development of minority scientists in both the psychosocial and neurobehavioral disciplines at multiple levels of the academic pipeline including high school research education (MHSSEP), undergraduate research training (COR) and graduate, postdoctoral and faculty research career development MIRDIP).

GRANT NUMBER: 5 T34 MH17153-14
PROJECT DIRECTOR: DUNBAR, JOSEPH C, PHD
ORGANIZATION: WAYNE STATE UNIVERSITY
DETROIT, MICHIGAN
TRAINING AREA: WAYNE STATE UNIVERSITY NIMH COR/MHSSEP TRAINING PROGRAM
(PREDOCTORAL)

DESCRIPTION: This competing renewal application requests continued support of the NIMH COR (Career Opportunities in Research) Honors Undergraduate Research Training and MHSSEP (Minority High School Science Education Program) Research Education Programs at Wayne State University. Since the goal of the NIMH COR/MHSSEP Program is to increase the number of underrepresented minority scientists participating in biomedical and behavioral research, the Wayne State University NIMH COR/MHSSEP Program is specifically designed to stimulate the interest and motivation of minority students, at multiple levels of the academic pipeline, to pursue research careers in neurobehavioral and psychosocial disciplines related to mental health research and the treatment of mental illness and behavioral disorders. There are approximately 30 faculty from the Colleges of Science, Medicine, Nursing, Pharmacy, Liberal Arts and Social Work who participate as Research Mentors and training faculty in the Wayne State University NIMH COR/MHSSEP Research Training and Education Program. The Wayne State University NIMH COR (formerly ADAMHA MARC) Program was originally funded in 1985 and the competing renewal ADAMHA MARC application was again funded in 1990 for another 5 years. The MHSSEP program was funded in 1992 as an institutional supplement to the parent ADAMHA MARC application for the support of 6 high school summer research apprenticeships beginning with the summer, 1993. Thus, overall administration of the combined NIMH COR/MHSSEP program at Wayne State University has been in place since 1992. Wayne State NIMH COR research trainees are Honors undergraduate junior and senior students (minimum GPA = 3.0) majoring in psychology, biology, chemistry, nursing, pharmaceutical sciences, social work and sociology. The program goals of the Wayne State University Program are to: 1) increase the number of minority undergraduates receiving baccalaureate degrees from Wayne State University that pursue advanced degrees leading to research careers in the biobehavioral, psychosocial and social work disciplines related to mental health; 2) provide an enriched interdisciplinary curriculum designed to foster and strengthen the interest and ability of undergraduate COR students to pursue a research career in mental health-related disciplines and to facilitate their entry into graduate programs; 3) offer multidisciplinary

research training experiences at Wayne State and at extramural sites to familiarize students with health-related investigations; 4) provide a strong advising component that will familiarize students with institutions and graduate programs that are best suited to his/her needs.

GRANT NUMBER: 5 T32 MH15750-19
PROJECT DIRECTOR: DUNKEL-SCHETTER, CHRISTINE, PHD
ORGANIZATION: UNIVERSITY OF CALIFORNIA, LOS ANGELES
LOS ANGELES, CALIFORNIA
TRAINING AREA: BEHAVIORAL ISSUES IN PHYSICAL AND MENTAL HEALTH
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The primary goal of this program is to train research scientists in health psychology, specifically in the application of basic theories and research in psychology to issues of physical and mental health. This program for predoctoral students and postdoctoral fellows includes seminars in health psychology, training in statistics and research methods, field experience, and closely supervised research. The program has particular expertise in the following areas: social support, stress and coping processes, adjustment to chronic disease and disorder, health behavior and primary prevention (especially HIV/AIDS), power and influences in health settings, and ethnic and minority factors in health. The faculty group is composed of five core faculty members, nineteen affiliated faculty from Psychology, and seven faculty members from Psychiatry, Public Health, and Immunology. It is proposed that both predoctoral and postdoctoral trainees be supported annually in this award. Predoctoral trainees will typically be second-year grad students in Social, Clinical, Behavioral, or Developmental Neuroscience who have completed their first-year course requirements and are ready to begin to minor in Health Psychology. Postdoctoral trainees will have completed a Ph.D. in Psychology. Two-thirds of postdoctoral trainees will be new Ph.D.'s in Psychology and the remaining third will have received their doctorates in Psychology three to five years earlier. Training takes place in Franz Hall, which houses the Department of Psychology. The Health Psychology program has offices and a microcomputer laboratory in Franz Hall.

GRANT NUMBER: 5 T32 MH14592-23
PROJECT DIRECTOR: EATON, WILLIAM, PHD
ORGANIZATION: JOHNS HOPKINS UNIVERSITY
BALTIMORE, MARYLAND
TRAINING AREA: PSYCHIATRIC EPIDEMIOLOGY TRAINING PROGRAM
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This psychiatric epidemiology training program is located in the Department of Mental Hygiene in the School of Public Health of Johns Hopkins University, and supported by core and associated faculty in the departments of mental hygiene, epidemiology, biostatistics, and psychiatry. The program for predoctoral students involves 1 1/2 years of carefully structured course work in the departments of mental hygiene, epidemiology, and biostatistics, in the School of Public Health, and in psychiatry, in the School of Medicine; followed by examinations, and completing a thesis in 3 to 5 years. The program for postdoctoral fellows involves two years of research with strong mentorship by faculty. The intellectual environment is rich and there are many opportunities for research collaborations. Core faculty members are leaders in the field and collaborate together on a variety of projects. Trainees have access to new and rich data sets such as the ECA follow-up, UNO-CAP, Prevention Center, and National Comorbidity Survey. Over the past ten years, more than 30 individuals have received support from the training grant. All former trainees continue to be active in the field of public mental health. All except one have published one or more scientific articles in the field of psychiatric epidemiology. Most former trainees are in academic positions, but there are some in government, private commercial, and non-profit agencies as well. Many trainees have obtained NIH or other grants as co-investigator or principal investigator. Training opportunities for psychiatric

epidemiologist in the department have expanded significantly since the last reviewed submission, and will continue to do so, due to new research projects, new complementary training programs, planned expansion of department faculty, and new emphasis on teaching within the School of Public Health. As a result, the training program can take advantage of economies of scale to recruit more intensively and selectively, to teach more courses, and to offer better amenities for trainees, especially postdoctoral fellows. The training program continues to be a central aspect of the Department of Mental Hygiene, providing a critical mass of support for its core discipline of psychiatric epidemiology.

GRANT NUMBER: 5 T32 MH19971-02
PROJECT DIRECTOR: EGETH, HOWARD E, PHD
ORGANIZATION: JOHNS HOPKINS UNIVERSITY
BALTIMORE, MARYLAND
TRAINING AREA: TRAINING IN PERCEPTUAL AND COGNITIVE NEUROSCIENCE
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The Departments of Psychology, Cognitive Science, and Neuroscience of The Johns Hopkins University propose a new interdisciplinary training program in perceptual and cognitive neuroscience. The purpose of the program is to train predoctoral and postdoctoral students for careers in teaching and independent research in the neural basis of perception and cognition through advanced coursework and laboratory experience. The program will emphasize the technical skill and theoretical insight required to independently conceive and execute cutting-edge, multidisciplinary research in each trainee's chosen area. The program will be jointly administered by core faculty in the three departments, supplemented by participating faculty in related departments within the University. Trainees will have a primary affiliation in one of the three departments. Each Ph.D. candidate will complete a common set of core requirements stipulated by the training program; in addition, each trainee will complete a small number of additional requirements stipulated by their home department. The core requirements include graduate courses in Foundations of Neuroscience, CNS Neurophysiology, Computational Neuroscience, Cognitive Neuroscience, and Cognitive Psychology. During the first year, each predoctoral trainee will complete a 10-week laboratory rotation in each of the two non-home departments (e.g., a Cognitive Science predoctoral student would complete rotations in Psychology and Neuroscience). All predoctoral and postdoctoral trainees will participate in joint seminars and Journal Club meetings in which program faculty and trainees will present and discuss current research in perceptual and cognitive neuroscience. An ongoing speaker series in Perceptual and Cognitive Neuroscience will provide trainees with exposure to current research by distinguished scholars and scientists. Research areas covered in the program include primate neurophysiology (visual and somatosensory systems), neural plasticity, functional neuroimaging (e.g., PET and fMRI), cognitive neuropsychology and neurology, visual and tactile psychophysics, bioacoustics and auditory perception, attention, perceptual development, and computational and neural network models of perception, memory, and cognition. All laboratory facilities have been newly renovated within the last 6 years and are state-of-the-art. Trainees and program faculty members are housed in adjacent buildings on the Homewood Campus of The Johns Hopkins University.

GRANT NUMBER: 5 T32 MH19524-07
PROJECT DIRECTOR: FELDMAN, SAMUEL M, PHD
ORGANIZATION: NEW YORK UNIVERSITY
NEW YORK, NEW YORK
TRAINING AREA: TRAINING IN SYSTEMS AND INTEGRATIVE NEUROSCIENCE
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This program supports pre- and postdoctoral training in systems and integrative neuroscience. Training will be carried out at the Center for Neural Science, an independent academic unit in the Faculty of Arts & Science at New York University that was formed in 1987 to bring together

neuroscientists from different departments. The University's commitment to the Center includes space, faculty, and budgetary support. The Center has a Ph.D. program in Neural Science, has developed an undergraduate major, has hired 7 new faculty and will add one more in the coming year. The primary training facility has 24,000 sq. ft. of renovated space, equipped to provide outstanding laboratories and offices for 11 faculty, including 8 new faculty. Newly built shared facilities are for histology and neuroanatomy, cell and molecular biology, an expanded and renovated vivarium, a computer center supporting a distributed network of super-mini-computer workstations, and a central seminar/reading room. In addition to 12 current faculty with primary appointments in the Center, faculty with primary appointments in Biology, Chemistry, Computer Science, Mathematics, Physics and Psychology hold joint appointments in the Center. The emphasis of the Center is systems and integrative neuroscience, and the 25 members of the Center are the faculty for the training program. Collaboration is encouraged between neuroscientists and colleagues trained in cognitive science, computer science and the quantitative study of complex systems. First-year predoctoral trainees take a core curriculum that includes lectures, laboratory rotations and a state-of-the-art teaching laboratory in which students get hands-on experience with modern experimentation in neurophysiology and biophysics, neurochemistry, experimental neuroanatomy, and behavioral and cognitive neuroscience. There is considerable flexibility in the program after the first year. The faculty includes a unique group of individuals with theoretical and computational skills, who are interested in training research students to use modern experimental and theoretical tools to study the organization of functionally defined brain systems. For postdoctoral students, the environment provides excellent opportunities for collaborative interaction and exposure to a wide range of approaches to the study of the nervous system. Several postdoctoral trainees have gone through the core curriculum; others take courses when appropriate; but postdoctoral training is primarily dedicated to providing research skills and opportunities. A new Fellows' Seminar is part of the postdoctoral training program, which also includes Journal Clubs and the weekly Seminar in Current Topics.

GRANT NUMBER:	5 T32 MH19389-09
PROJECT DIRECTOR:	FINLAY, BARBARA L, PHD
ORGANIZATION:	CORNELL UNIVERSITY, ITHACA ITHACA, NEW YORK
TRAINING AREA:	MULTIDISCIPLINARY TRAINING IN DEVELOPMENTAL PSYCHOLOGY (PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This is a predoctoral/postdoctoral training program in developmental psychology in the Graduate Field of Psychology at Cornell University, Ithaca. The focus of the program is the integration of psychological approaches with biological approaches to the same systems. Central areas for training, represented by multiple faculty members, are in the areas of development of communicative and cognitive systems; perception; gender-related and reproductive behavior; and early computational approaches. Trainees with central interest and expertise in either psychological or biological approaches to development will be admitted in roughly equal proportion, and will receive training integrating these approaches through core courses, a research and speaker's seminar series, and optional laboratory rotations, as well as traditional coursework prescribed by the student's graduate committee. Joint advising is accomplished through the graduate committee system at Cornell, in which the student elects a committee of four members to direct their graduate education: students supported by the training grant will be required to have two members of the training grant staff on their graduate committee representing both the psychological and biological approaches to development. The core faculty in the biology and psychology of development are based in the Graduate Field of Psychology, but will draw widely across the University for appropriate expertise.

GRANT NUMBER: 5 T32 MH18012-15
PROJECT DIRECTOR: FISCHBACH, GERALD D, MD
ORGANIZATION: HARVARD UNIVERSITY
BOSTON, MASSACHUSETTS
TRAINING AREA: RESEARCH TRAINING IN NEUROSCIENCE
(PREDOCTORAL)

DESCRIPTION (Adapted from the applicant's abstract): This Training Program represents the major source of support for students in the Program in Neuroscience at Harvard University. The Training Grant enters its tenth year of operation in September 1993. The goals remain the same: (1) to train a generation of research scientists who have a broad background in neuroscience and who are interested in disease of the nervous system; and (2) to link into a single training faculty the large number of neuroscientists at Harvard Medical School, its affiliated hospitals, and Harvard College. Trainees complete a sequence of courses in neuroscience and in collateral courses in molecular biology, immunology, and other subjects, and they rotate through three different laboratories. They then carry out thesis research leading to the Ph.D. degree in neurobiology. The program has grown significantly and is now approaching its target of 75 graduate students. The program includes more than 100 faculty from Harvard's basic science departments and affiliated hospitals, of which 65 are members of this training program.

GRANT NUMBER: 5 T32 MH18827-11
PROJECT DIRECTOR: FISKE, SUSAN T, PHD
ORGANIZATION: UNIVERSITY OF MASSACHUSETTS AMHERST
AMHERST, MASSACHUSETTS
TRAINING AREA: COGNITIVE AND EMOTIONAL RESPONSES TO ADVERSITY
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This program supports predoctoral training in the psychology of adversity. In the Personality and Social Psychology Program at the University of Massachusetts at Amherst, all ten faculty members are engaged in research and theory that bears on people's cognitive and emotional reactions to actual or potential adversity. The work focuses on a few central conceptual themes: (a) the self- concept, (b) emotion rules, and (c) interdependence networks, each of which provides a basis for better understanding processes central to maintaining mental health in the face of adversity. Research and theory from the program have already been applied to such negative life events as victimization, divorce, discrimination, bereavement, physical illness, stress, and disruptions in close relationships. Faculty research is strongly theory- based; yet, it is applied to real work problems of relevance to mental health. Program trainees receive a thorough grounding in theory and basic research as well as in theory-based applied research, a distinguishing characteristic of the University of Massachusetts program. Support is requested for predoctoral students who have demonstrated clear motivation to pursue the psychology of adversity and who show considerable potential to conduct original theory-based applied research. In addition to formal coursework and research involvement, the training program includes both a weekly seminar on adversity and a yearly concentrated conference on the psychology of adversity. The program is housed in the Department of Psychology, University of Massachusetts at Amherst, which has computer facilities and laboratory, office, and classroom space ample for the training needs.

GRANT NUMBER: 5 T32 MH19114-09
PROJECT DIRECTOR: FLAVELL, JOHN H, PHD
ORGANIZATION: STANFORD UNIVERSITY
STANFORD, CALIFORNIA
TRAINING AREA: TRAINING IN DEVELOPMENTAL PSYCHOLOGY
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The training program in developmental psychology seeks to train scholar-researchers who are able to contribute important new scientific knowledge concerning the psychological development of infants and children. The trainees' education is obtained through a coherent program of formal courses, special area and research seminars, and a close and sustained research- apprenticeship with faculty advisors. This training program is designed to engender high levels of skill in conceptual analysis and theory development, and in the design, execution, and analysis of empirical studies of significant developmental problems. Developmental faculty members and their students are currently investigating a variety of challenging problems in the areas of cognitive, linguistic, and socioemotional development. The training program normally demands 4 years beyond the bachelor's degree and follows the requirements of the doctoral degree program for the Department of Psychology. Students, in consultation with the faculty, plan a program of courses best suited to their research interests. From the beginning of their first year in the program until they are awarded the Ph.D., they spend at least one-half time in research under faculty supervision. In addition to course work in psychology within the department, trainees are required to deepen their knowledge of a related area by electing a coherent set of graduate courses in some other discipline, e.g., computer science, linguistics, or statistics. Students also receive training and experience in teaching. Funds are requested to support predoctoral trainees. Approximately 40 students per year apply for admission in the Developmental Program. Outstanding students who show exceptional promise for a research career enter the program each year. The majority of the graduates take academic positions in teaching and research, but a significant minority chooses positions in applied settings concerned with education, health care, or clinical work. The Psychology Department has ample laboratory space, ready access to subjects from infants to adults, a number of computer systems for running psychological experiments, simulation, and data analysis, as well as the necessary video-recording equipment needed for generating stimuli and for recording data, and supporting shop facilities. Other resources needed to achieve the training goals are also available.

GRANT NUMBER: 1 R25 MH57253-01
PROJECT DIRECTOR: FLORSHEIM, PAUL W, PHD
ORGANIZATION: UNIVERSITY OF UTAH
SALT LAKE CITY, UTAH
TRAINING AREA: UNDERGRAD RESEARCH FOR UNDERREPRESENTED STUDENTS
(UNDERGRADUATE)

DESCRIPTION (Applicant's Abstract): The proposed summer undergraduate research program is designed to facilitate the development of minority scholars and generally increase the representation of minorities in psychological science. Eight promising undergraduates from Underrepresented populations will participate in an eight week research program. Trainees will attend a seminar on research and professional issues and participate directly in the research activities of faculty mentors. During the final week of the program, trainees will present their research at a poster session, provide a formal oral presentation of their project, and submit an APA style paper on their findings. Trainees will live on campus in a University dormitory and engage in various social and recreational activities aimed at facilitating their adjustment to their summer environment. The specific objectives of the training program are to: a) provide intensive hands-on research experience in the psychological sciences; b) develop research skills; c) develop skills in the written and oral communication of research findings; d) increase trainees self-confidence in their scholarly abilities; e) expose students to a range of research opportunities in psychology; f) increase trainees preparation for graduate school; g) help trainees acquire the credentials necessary for entrance into the graduate program of their choice; h) encourage students to pursue research and academic careers in the behavioral and

neurosciences. Follow-up interviews will be used to assess the long-term effectiveness of the program for facilitating mental health research activities among underrepresented minorities.

GRANT NUMBER: 5 T32 MH17168-15
PROJECT DIRECTOR: FLUHARTY, STEVEN J, PHD
ORGANIZATION: UNIVERSITY OF PENNSYLVANIA
PHILADELPHIA, PENNSYLVANIA
TRAINING AREA: PRE AND POSTDOCTORAL TRAINING IN BEHAVIORAL NEUROSCIENCE
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This is request for support for a predoctoral and postdoctoral training program in Behavioral Neuroscience at the University of Pennsylvania. The program is designed to prepare exceptional students for a productive research career in the analysis of the neural bases of behavior using cellular and molecular techniques or computational approaches. Training at both the behavioral and either cellular/molecular or computational levels is ensured by having two types of program faculty: primary trainers, whose research directly addresses issues in behavioral neuroscience; and secondary trainers, cell and molecular biologists or computational neuroscientists interested in collaborating on research problems with behavioral relevance. Training faculty are drawn from department in four schools of the University of Pennsylvania. Graduate education in the Life Sciences is based on independent interdepartmental "Graduate Groups," which foster multidisciplinary training and collaborative research. Students, in the absence of the boundaries of traditional departments, are free to select courses and lab rotations from a rich and varied menu. The separate, University-mandated Office of Biomedical Graduate Studies (BGS) ensures curricular development, quality control, and uniform admissions standards. Management of the training program will be by an interdepartmental executive committee that sets and reviews policy and selects and evaluates the progress of trainees. The predoctoral component of the proposed training grant serves for four Graduate Groups (Neuroscience, Biology, Pharmacology, and Psychology) as the major source of support for graduate students interested in behavioral neuroscience. The Behavioral Neuroscience Training program encourages broad training with a behavioral emphasis by offering cooperatively taught courses, a biweekly Behavioral Neuroscience Seminar Series and associated journal club, and an annual Behavioral Neuroscience Retreat. The postdoctoral component of the training program will help attract promising young researchers to the field of behavioral neuroscience and facilitate transition to other mechanisms of support for career development. Together, the predoctoral and postdoctoral components will serve a vital role in training behavioral neuroscientists well versed in modern cellular, molecular, and computational approaches to neurobiology.

GRANT NUMBER: 5 T32 MH16089-20
PROJECT DIRECTOR: FRANCIS, E ARACELIS, PHD
ORGANIZATION: COUNCIL ON SOCIAL WORK EDUCATION
ALEXANDRIA, VIRGINIA
TRAINING AREA: SOCIAL WORK RESEARCH FELLOWSHIP PROGRAM
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The goal of the CSWE's Minority Research Fellowship Program (MRFP) is to ensure that ethnic minority investigators assume a prominent position among the nation's next generation of mental health researchers. The CSWE-MRFP will support the development and training of individuals in social work doctoral programs to enable them to undertake active, productive careers in scientific investigations related to mental health and mental illness. Program objectives include: identifying ethnic minority social workers interested in obtaining doctoral training in mental health research, including mental health services research; assisting in the identification of appropriate doctoral programs in social work for potential students and facilitating their transition into mental health research careers following training; monitoring the progress of CSWE-MRFP fellows

during their doctoral training and into the early stages of their post-doctoral careers; providing opportunities for CSWE-MRFP fellows to network with mental health researchers at national meetings, workshops and seminars; offering summer training and research workshop opportunities; assisting in the transition from student to professional by identifying potential post-doctoral opportunities; establishing networks for CSWE-MRFP fellows to interact with public and private institutions with an interest in funding mental health research projects.

GRANT NUMBER: 5 T32 MH19927-05
PROJECT DIRECTOR: FRITZ, GREGORY K

ORGANIZATION: RHODE ISLAND HOSPITAL
PROVIDENCE, RHODE ISLAND
TRAINING AREA: RESEARCH TRAINING IN CHILD MENTAL HEALTH
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The proposed institutional research training program is directed at training M.D. and Ph.D. post-residency and postdoctoral students to carry out independent research as full-time university faculty members in departments of child and adolescent psychiatry or their equivalent. The Brown University Division of Child and Adolescent Psychiatry has faculty with background in normative development, psychopathology and the interface between the two approaches; a major strength of this group of researchers is their diversity. Three broad areas of research training will be offered within this context: (1) Pediatric Psychiatry and Developmental Disabilities; (2) Development Processes and Risk Factors; and (3) Biobehavioral Regulation and Development. The applicants will enroll Ph.D. and M.D. candidates each year for five years and provide each trainee with an opportunity of selecting one senior research mentor and program to join. Consistent with each trainee's individual needs, a graduated program of progressive independent research will be designed. A formal curriculum will include training in: research methods/design and statistical analysis, particularly relevant to longitudinal developmental studies; structured, multi-informant and multi-modal developmental assessments suitable for children, families and their contexts; the unique role of risk and protective factors in developmental psychopathology; prevention and early intervention; ethics, informed consent, research with minors and scientific integrity; and, grant writing. In addition, tutorials, guided reading and formal courses at Brown University or surrounding universities will satisfy the particular curriculum needs of special trainees.

GRANT NUMBER: 5 T32 MH15795-19
PROJECT DIRECTOR: GALLISTEL, CHARLES R, PHD
ORGANIZATION: UNIVERSITY OF CALIFORNIA, LOS ANGELES
LOS ANGELES, CALIFORNIA
TRAINING AREA: TRAINING IN PHYSIOLOGICAL PSYCHOLOGY
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This program trains predoctoral and postdoctoral fellows in behavioral neuroscience; related sciences such as neuroanatomy, neuropharmacology, cognitive science, etc.; and in the application of this knowledge and these experimental methods to problems in mental health and health in general. For predoctoral candidates, the timing consists of a series of required and elective courses and seminars plus an apprenticeship in the laboratory of one or more of the thirteen preceptors. Predoctoral students must also pass a comprehensive exam plus a qualifying exam (on their thesis proposal), and do an original experimental thesis. The unique characteristics of this training program are: 1) a weekly brown bag seminar that combines discussion of recent papers in the literature with presentation of the research of the trainees and preceptors. Part of this seminar is also devoted to sessions that emphasize clinical applications; b) a requirement to get involved in a clinical setting, do clinical researches, or take clinically relevant seminars. Requirements a) and b) form, along with laboratory research,

the core of the postdoctoral program. The aim of this program is to give both basic science training and experience with the clinical applications of behavioral neuroscience. Particularly relevant, then, are the increased opportunities for direct clinical experience through the requirements of the training program.

GRANT NUMBER: 5 T32 MH15730-19
PROJECT DIRECTOR: GARRITY, THOMAS, PHD
ORGANIZATION: UNIVERSITY OF KENTUCKY
LEXINGTON, KENTUCKY
TRAINING AREA: RESEARCH TRAINING IN MEDICAL BEHAVIORAL SCIENCE
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This training program proposes to support pre- and postdoctoral trainees along with a training faculty. The environment is rich with opportunities for behavioral research in the Medical Center, the wider University, and communities beyond. Trainees and faculty are housed in a building specifically designed for the Department's functions with the Medical Center complex. All trainees have 24-hour/day access to the department and its computer network, which is linked to the campus computer network. This program is designed to prepare trainees to assume research responsibilities in academic, and other scientific organizations concerned with mental health and the behavioral aspect of health and medical care. Postdoctoral fellows will either have a doctorate in a behavioral science discipline and will be preparing for a research role in mental health or behavioral medicine, or they will be health professionals who are seeking a behavioral science research orientation. Predoctoral trainees will be concentrating in medical behavioral science as part of their program for a doctorate in a behavioral science discipline. Basic elements of the program include: (1) research training designed to provide experience in utilizing the basic building blocks of research (interviewing, case study, experimental design, development and pretesting of instruments, data analysis) and independent research competence; (2) a multidiscipline orientation which takes students beyond their basic discipline and provides exposure to key theoretical concepts and methodological issues of the related behavioral sciences along with a biobehavioral conceptualization; (3) a program of enculturation to mental health-medical problems, issues and personnel; (4) opportunities to explore topics in medical behavioral science through seminars offered by departmental faculty; and (5) opportunities for independent research around relevant questions in mental health and behavioral medicine that can constitute significant learning experiences for postdoctoral fellows and a dissertation project for predoctoral trainees. The program for postdoctoral fellows will be individually geared to the objectives of the fellows and will build on their previous knowledge and experience.

GRANT NUMBER: 5 R25 MH57541-02
PROJECT DIRECTOR: GAZZANIGA, MICHAEL S, PHD
ORGANIZATION: DARTMOUTH COLLEGE
HANOVER, NEW HAMPSHIRE
TRAINING AREA: SUMMER INSTITUTE OF COGNITIVE NEUROSCIENCE
(PREDOCTORAL/POSTDOCTORAL/OTHER)

DESCRIPTION (Adapted from applicant's abstract): This proposal seeks matching funds for five years to support the Summer Institute in Cognitive Neuroscience, an annual, multidisciplinary training program in cognitive neuroscience. The broad, long-term objectives of The Summer Institute are to advance the studies of mind and brain that will lead to our better understanding mental functioning, mental health, and mental disorders. Education Program Plan: The Institute brings together senior graduate students, postdoctoral fellows, physician fellows, psychiatrists, psychologists, and junior faculty of the wide variety of disciplines that intersect in the study of human consciousness and cognition. The topics and faculty change yearly to allow rapid response to areas of mind/brain research that show promise for advancing the research agenda. Together, the fellows and faculty address problems in the science of mind,

defining questions, presenting hypotheses, exploring existing experimental results, and developing each participant's ability to carry on innovative and important research into mind and brain mechanisms and disorders. The format includes formal lectures, laboratory exercises, and demonstrations by faculty, as well as constant interaction fostered by social events and the proximity of the fellows in a residential setting. In a five-year cycle, four of the five Summer Institutes run for 2 weeks and train 70 fellows. In the fifth year, the program is extended to 3 weeks with a larger faculty and 25 fellows invited back from previous Institutes for a comprehensive review of the field of cognitive neuroscience. The information synthesized and evaluated at this Summer Institute is then published as *The Cognitive Neurosciences*, edited by Dr. Michael Gazzaniga, Institute Director. *The Cognitive Neurosciences* is widely used as the primary and standard reference book in the field. Curricula for the Institutes are set one year in advance. The specific aims of the 1997 Summer Institute are to ascertain the usefulness and importance of brain imaging in cognition and mental states. The specific activities proposed in 1997 include brain dissection laboratories with direct comparison to various images, lectures by experts in selected areas of cognitive neuroscience who use imaging, a site visit to a functional magnetic resonance imaging (fMRI) facility, and debates on: the implications of neuroimaging for models of brain organization, combining temporal and anatomical imaging data, the ultimate resolution of spatial and temporal data, the significance of magnet strength in fMRI and related vascular issues, the "Talairach atlas," and the significance of size of brain structures.

GRANT NUMBER:	5 T32 MH19926-04
PROJECT DIRECTOR:	GELMAN, ROCHEL, PHD
ORGANIZATION:	UNIVERSITY OF CALIFORNIA, LOS ANGELES LOS ANGELES, CALIFORNIA
TRAINING AREA:	TRAINING IN DEVELOPMENTAL COGNITIVE SCIENCE (PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This program is designed to train developmental cognitive science researchers who specialize in research areas related to the epigenesis of mind, including: perception, cognition, language, knowledge of others, and mechanisms of learning, problem solving, and transfer. Together the developmental and comparative approaches combine as powerful tools for sorting out the mind's building blocks, their interactions with each other, and their interactions with the environments in which they function. These findings are key ingredients for computational models of mind, as they inform fundamental assumptions about architecture, initial states, and modes of knowledge acquisition. They also inform applied efforts to upgrade the level of scientific and technical literacy of high school and undergraduate students. The training model proposed intends to accomplish two goals: to anchor students in the developmental sciences, and to train them in depth in the areas of cognitive science that are related to their research focus. These areas include psychology, linguistics, biology, computer science, philosophy, and anthropology. Core and affiliate faculty from these disciplines will collaborate. Components of the program are held together with common curricular goals, as well as attendance at the Developmental and Cognitive Science Forums and the Cognitive Science Series. The Advisory and Training Committees will work with the director to oversee the direction of the program, selection of trainees, and the curricular and training plans of the predoctoral and doctoral trainees. Themes organize the selection of postdoctoral trainees in a given year. The program takes advantage of UCLA's location in Los Angeles. The power of combining ontogenetic and comparative methods is magnified with the ability to incorporate culture as a design dimension. Since Los Angeles is a microcosm of the world's cultures, the applicants are able to pursue this effort. UCLA's location also dovetails with the applicants' successful recruitment of students from underrepresented groups.

GRANT NUMBER: 2 R25 MH19742-06
PROJECT DIRECTOR: GERSHENSON, CELIA W, PHD
ORGANIZATION: UNIVERSITY OF MINNESOTA, TWIN CITIES
MINNEAPOLIS, MINNESOTA
TRAINING AREA: SHORT TERM MINORITY UNDERGRADUATE NIMH AREAS RESEARCH
(UNDERGRADUATE)

DESCRIPTION (Applicant's abstract): The overall goal of this Educational Development Grant Application is to recruit into research careers outstanding potential scholars from underrepresented groups. This is achieved by providing a 10 week intensive research and educational experience at a major research institution to 6 undergraduates from underrepresented populations. Funding is requested for the continuation of this highly successful program supported by NIMH since 1993. The participants are those who have shown potential and have expressed an interest to go on to graduate studies, and to pursue research and academic careers. They are exposed to in depth research training, direct experiences, seminars, and other educational activities. They work under the direction of individual faculty mentors. Potential mentors are drawn from the Departments of Psychology, Child Development, Educational Psychology, Psychiatry, Pharmacology, Kinesiology, Computer Science, and the School of Management. The mentors are all active researchers in areas related to Mental Health and Behavioral Science. The participants are members of the mentors research team. They spend at least 40 hours per week in research and research related activities. In addition, they attend a seminar 3 times per week. These seminars include faculty presentations on research discussion of research integrity, research design, and graduate school opportunities. The participants give oral presentations and prepare written research reports. They also participate in a weekly seminar which provides practice in preparing graduate school applications and taking the GRE. They are housed in a University dormitory together with those participating in similar programs in other disciplines. Field trips to other research facilities, team building social and recreational activities are other components of the program. The participants funded by this grant do not have other federal funding. The University funds the full participation of 3 to 4 COR or MARC program trainees. The specific goals of this Competitive Continuation are to 1) provide interested students with new research skills through intensive research experience, 2) facilitate the development of self-confidence in a facsimile of a graduate experience at a major research institution 3) encourage the selection of research and academic careers in mental health and related areas 4) increase the diversity of those choosing graduate study and research careers, and 5) In a new thrust, to involve minority institution faculty in this training opportunity.

GRANT NUMBER: 2 T32 MH19111-09
PROJECT DIRECTOR: GILMORE, JOHN H, MD
ORGANIZATION: UNIVERSITY OF NORTH CAROLINA, CHAPEL HILL
CHAPEL HILL, NORTH CAROLINA
TRAINING AREA: FELLOWSHIP: CLINICAL PSYCHOBIOLOGY AND PHARMACOLOGY
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This application is the competitive renewal of T32 MH 19111-08 "Fellowship: Clinical Psychobiology and Pharmacology." The purpose of the training program is to attract physicians to careers in clinical, basic, and transnational neuroscience research, and to provide effective training that will enable fellows to become productive, independent investigators who will contribute to the future advance of knowledge in psychiatry. The program is situated in the Department of Psychiatric at the University of North Carolina at Chapel Hill, a Department with a rich history of clinical and basic research and research training in psychiatric disorders as well as extensive clinical and basic research resources. The Department is the home of an NIMH-sponsored Mental Health Clinical Research Center, which provides fellows with a broad research infrastructure on which to base their training. The Program's guiding philosophy is that a broad-based education in the disciplines relevant to study of psychiatric disease, including psychopharmacology, neuropsychology, neurochemistry, neuroimaging, molecular neurobiology, and genetics provides an essential background and context for a sustained career as a creative investigator. The fellowship provides a "hands-on" experience in all phases of research, including

1) the formulation of clear and testable research questions, 2) the design of appropriate research plans. utilizing effective and well-chosen methodologies, 3) the collection and management of data, and 4) the analysis. interpretation, and clear presentation of results. The program also provides a foundation for the integration of basic neuroscience research with clinical research and for the advancement of transnational research, Fellows are given the opportunity to work in one of several basic labs of the faculty of the program, and those fellows who focus on clinical research also receive didactic instruction in basic research techniques (and consequent interactions with basic scientists). This training program emphasizes ethical issues and the responsible conduct of research. In addition, fellows receive training in the important skills that are essential for successful academic careers, including critical reading of the literature, manuscript and grant preparation, grant preparation, and presentations at meetings and lectures. The graduates of this research training program have an outstanding record of success as investigators, including several who have successfully pursued research directions that integrate basic and clinical research. The training program has an excellent record of recruiting individuals from under-represented ethnic groups as well. This research training program's competitive renewal requests support for four postdoctoral positions a year for years 9-13, so that it can continue to train the next generation of research psychiatrists.

GRANT NUMBER: 2 T32 MH18831-11
PROJECT DIRECTOR: GLASER, RONALD, PHD
ORGANIZATION: OHIO STATE UNIVERSITY
COLUMBUS, OHIO
TRAINING AREA: TRAINING PROGRAM IN PSYCHONEUROIMMUNOLOGY
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The purpose of this training program is to provide an environment for M.D.'s and Ph.D.'s at the postdoctoral level to learn the techniques, methodology, and conceptual framework involved in the field of psychoneuroimmunology or neuroimmunomodulation. As part of this program, we will stimulate interdisciplinary collaborations among researchers in the following fields: immunology, endocrinology, virology, pharmacology, psychiatry, psychology, biochemistry, and molecular biology. In this way, trainees will be provided with an interdisciplinary experience and be able to observe first hand the integration of laboratory research from diverse fields. Trainees will observe and participate in the design of experiments, performance of experiments, analysis of data, and reporting of results relating to studies involving behavior and central nervous system influences on the immune response. This program is designed to contribute to the development of research expertise in the broad area of psychoneuroimmuno-logy and its implications for health, as well as in the cellular biology of the neuroimmune axis. Trainees will be postdoctoral fellows with various backgrounds, including psychiatry/psychology, neuroscience, or immunology. The training period will be two or three years depending upon the extent of basic science training required for each trainee. Candidates for the training program will be evaluated on the basis of past performance during graduate/ medical education, scholarly work including publications and presentations, and letters of recommendation. There are twelve collaborating laboratories that constitute the training laboratories. They are located in five buildings (Graves Hall, Doan Hall, Postle Hall, Biological Sciences Building, and the Comprehensive Cancer Center) on the south campus medical complex of The Ohio State University, which also contains the Health Sciences Library. All the laboratories are within easy walking distance of each other. One laboratory is located in the Wexner Institute of Pediatric Research at Children's Hospital in downtown Columbus, which is approximately three miles from campus. The training program will take advantage of the preceptor's expertise, resources, and ongoing collaborative research projects to provide an environment for training postdoctoral fellows in the field of psychoneuroimmunology.

GRANT NUMBER: 5 T32 MH19111-09
PROJECT DIRECTOR: GOLDEN, ROBERT N, PHD
ORGANIZATION: UNIVERSITY OF NORTH CAROLINA, CHAPEL HILL
CHAPEL HILL, NORTH CAROLINA
TRAINING AREA: FELLOWSHIP: CLINICAL PSYCHOBIOLOGY AND PHARMACOLOGY
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This program is designed to provide intensive training in clinical psychobiologic and psychopharmacologic research. The program selects psychiatrists who are clearly committed to and well suited for academic research careers. It is sponsored by the University of North Carolina Department of Psychiatry, and is closely integrated with several related programs, including: an NIMH funded Mental Health Clinical Research Center (CRC), and a NIH funded UNC General Clinical Research Center. Major features of this program include: 1) a rigorous selection process following a national search for potential fellows; 2) regular evaluations and monitoring of the progress of each fellow by program faculty at 6-month intervals, coupled with evaluations of the training program by each fellow; 3) intensive supervision via individual apprentice/mentor working relationships in which each fellow develops under the close tutelage of an experienced investigator; 4) integrated didactic educational programs, including formal course work, seminars, and lecture programs in clinical and basic neurosciences, clinical research methodologies, and other relevant areas; and 5) extensive teaching of ethics and the responsible conduct of research, utilizing lecture, seminar, and small group discussion formats. Each year, new fellows are selected for this two-year fellowship, based on demonstrated commitment to, and aptitude for, academic careers. Each fellow works under the close supervision of an experienced clinical investigator. Collaboration and training with basic scientists are encouraged. Clinical research populations include psychiatric inpatients and outpatients, HIV infected subjects, and healthy volunteers. Clinical investigations are conducted at the UNC General Clinical Research Center, the Inpatient Psychiatry Service at the UNC Neuropsychiatric Hospital, the UNC Psychopharmacology Clinic, and the Clinical Research Unit at Dorothea Dix Hospital. Basic research training is available through the basic laboratories at the UNC Mental Health Clinical Research Center. In the first period of funding, all of the program's graduates entered research oriented faculty positions at major medical schools.

GRANT NUMBER: 5 T32 MH19924-05
PROJECT DIRECTOR: GREENBLATT, DAVID J, PHD
ORGANIZATION: TUFTS UNIVERSITY, BOSTON
BOSTON, MASSACHUSETTS
TRAINING AREA: TRAINING IN GERIATRIC PSYCHOPHARMACOLOGY
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): Understanding the pharmacokinetics, pharmacodynamics, and molecular biology of psychotropic drugs in the elderly underlies the capacity to provide safe and effective treatment of mental illness in the aging population. The proposed training program is designed to support a postdoctoral fellow beginning each year for a period of two years in each of two tracks: pharmacokinetic/ pharmacodynamic and molecular pharmacology. The goal of the program is to train independent investigators in geriatric psychopharmacology. The program includes a didactic component with courses in pharmacokinetics, pharmacodynamics, neurochemistry, ethics in research, as well as regular seminars. In addition, a research component consists of the development of a research protocol in collaboration with a core faculty member, followed by implementation of research including analysis of data and preparation of a manuscript. Research areas in the pharmacokinetic/pharmacodynamic track include pharmacokinetic/pharmacodynamic correlations for benzodiazepines, including EEG analyses, and the effects of aging on these processes. Research areas in the molecular pharmacology track include the molecular basis of altered drug effects in the elderly, and the dynamics of neuropeptide processing. The applicant and his co-director with the guidance of a 3-member Institutional Advisory Board of senior faculty, a 3-member resource panel, and a 3-member external advisory board will administer the program.

GRANT NUMBER: 5 T35 MH16772-16
PROJECT DIRECTOR: GRODZICKER, TERRI, PHD
ORGANIZATION: COLD SPRING HARBOR LABORATORY
COLD SPRING HARBOR, NEW YORK
TRAINING AREA: NEUROBIOLOGY SHORT TERM TRAINING
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The Cold Spring Harbor Laboratory proposes to give three laboratory courses as part of its post-graduate summer training program in neurobiology. These courses, to be held in 1996-2000, include Imaging Structure and Function in the Nervous System, Neurobiology of *Drosophila*, and Molecular Cloning of Neural Genes. These are short intensive three-week courses which prepare the student to enter directly into research that makes use of advanced and/or specialized techniques in contemporary aspects of neurobiological research. Each course has a different emphasis and serves a different need. The course on Imaging Structure and Function in the Nervous System stresses advances in optical microscopy and digital imaging processing in conjunction with a variety of probes for visualization of the structure and function of neurons, synapses and networks in the brain. The Neurobiology of *Drosophila* course allows students to learn and take advantage of the powerful genetics of this model organism as an experimental system for analyzing behavior, neural development, learning and memory and neuronal physiology. The course on Cloning of Neural Genes seeks to train students by providing expertise in production and expression of cDNA and genomic libraries, DNA sequencing, and expression of genes using different vector systems and assay methods, with emphasis on applications to the nervous system. Faculty are chosen on the basis of their contributions to and knowledge of the field covered in each course. The faculty invites lecturers who give up-to-the-minute reports on current research. The lecturers have all made significant contributions to their fields. The trainees range from graduate students to senior investigators. Individuals with a M.D. as well as a Ph.D. attend each year. The course faculty chooses them from the large number of applicants. Because of the short duration of the courses, senior as well as junior individuals can attend and receive a short, intense period of training in an environment remote from other demands on their time and attention. The neurobiology laboratory courses provide an unusual opportunity for scientists to retrain in another specialty within neuroscience or to apply the work of a new field to their own research interests. The course also allows investigators from other fields to learn current areas of neurobiological research.

GRANT NUMBER: 5 T32 MH19127-09
PROJECT DIRECTOR: GRUSKY, OSCAR, PHD
ORGANIZATION: UNIVERSITY OF CALIFORNIA, LOS ANGELES
LOS ANGELES, CALIFORNIA
TRAINING AREA: RESEARCH TRAINING ON SERVICE SYSTEMS FOR PERSONS/C AIDS
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This is a proposal to renew a multidisciplinary training program in the organization of mental health service systems for persons with HIV infection and AIDS. A coordinated training program is designed led by scholars from eight fields: medicine, psychiatry, sociology, psychology, health services, epidemiology, nursing, and social work. It includes a three-year sequence for advanced students pursuing a Ph.D. in the social sciences or psychology and a two-year training sequence for those with a M.D. or a doctorate in the social sciences or psychology. The goal of the program is to enable trainees to develop the needed knowledge and technical skills so that they may pursue either academic or non-academic careers in mental health service systems research concerned with services for seriously mentally ill persons with HIV infection and AIDS. A total of 23 students (13 predoctoral and 10 postdoctoral) have been trained or are undergoing training since the program began in 1989. All trainees have participated in HIV research as part of their training. Four Ph.D. dissertations on HIV have been

completed and nine others are in progress. Trainees have obtained academic and nonacademic posts. The program curriculum has been enhanced. New HIV courses have been added to the UCLA curriculum. Two new associate directors have been appointed. Eighteen active faculty in HIV research, mental health services, or ethnic/racial relations make up the program staff. New linkages to major HIV and mental health services research projects have been made in order to strengthen the research training.

GRANT NUMBER: 1 R25 MH58908-01
PROJECT DIRECTOR: GUARNACCIA, PETER J, PHD
ORGANIZATION: RUTGERS STATE UNIVERSITY
NEW BRUNSWICK, NEW JERSEY
TRAINING AREA: MINORITY UNDERGRADUATE MH RESEARCH TRAINING PROGRAM
(UNDERGRADUATE)

DESCRIPTION (Applicant's abstract): In accordance with the national goals of HEALTHY PEOPLE 2000, Project L/EARN targets members of ethnic and cultural groups traditionally under represented in mental health related graduate programs, with the intent of increasing the number of minority researchers in the mental health field. Project L/EARN is a program of the multi-disciplinary Institute for Health, Health Care Policy and Aging Research at Rutgers University. This program provides scientific training, experience and guidance to make undergraduate members of under represented groups stronger candidates for admission to relevant graduate programs in mental health research. The summer training component of Project L/EARN consists of a highly-structured twelve-week experience. During the first nine weeks, the program provides six hours of daily instruction in the principles of scientific inquiry including study design, methods of data collection, techniques of data management and statistical analysis, and fundamentals of statistical package programming. Faculty volunteer time to Project L/EARN, providing guest lectures on a broad range of research issues, and serving as mentors. Each intern undertakes an independent research project under the guidance of their faculty mentor, and reading assignments provide a broad foundation in current health and mental health research. The student seminar series provides the opportunity for the interns to present their research projects, demonstrating the integration of the statistical, analytical and substantive issues. Apprenticeships the last month provide an opportunity to contribute to the mentor's research agenda. This proposal includes a request for support to extend the summer training component of this targeted training program to national applicants from under represented groups who are interested in mental health research. Project L/EARN has been extremely successful in integrating its trainees into active research during the academic year and requests funds to support and expand this facet to include additional training/research experiences at other Universities, research facilities and professional conferences.

GRANT NUMBER: 2 T32 MH19112-09
PROJECT DIRECTOR: GUR, RAQUEL E, MD, PHD
ORGANIZATION: UNIVERSITY OF PENNSYLVANIA
PHILADELPHIA, PENNSYLVANIA
TRAINING AREA: SCHIZOPHRENIA: A NEUROPSYCHIATRIC PERSPECTIVE
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The proposed continuation of the training program is aimed at providing research training in neuropsychiatry focusing on the understanding of schizophrenia as a brain disorder. Postdoctoral fellowships in clinical and basic neurosciences will be offered in the context of an interdisciplinary collaborative program centered in the neuropsychiatry section of the Department of Psychiatry. The proposed training program includes four units: Neuropsychiatry (Neuroimaging and Neuropsychology), Genetics, Neuropharmacology, and Neuropathology. The program is designed for psychiatrists and neuropsychologists and other physicians and researchers in clinical or basic neurosciences with exceptional promise to contribute to the

understanding of neurobiology of schizophrenia and related disorders. The training will take place at the Medical Center of the University of Pennsylvania, which includes the clinical, neuroimaging, and basic science facilities. It is proposed to admit trainees each year for a two-year training period. Training will include participation in and conduct of research projects as well as seminars and didactic coursework. The program director will be assisted by the training committee and mentors who monitor the progress of trainees and aid in the implementation of the training program considering their needs. Fellows will acquire and augment skills in methodology, statistics, assessment, and aspects of neuroscience research necessary for launching a career as independent investigators.

GRANT NUMBER: 2 T34 MH19519-07
PROJECT DIRECTOR: HALL, EDWARD, PHD
ORGANIZATION: TALLADEGA COLLEGE
TALLADEGA, ALABAMA
TRAINING AREA: TALLADEGA COLLEGE COR UNDERGRADUATE HONORS PROJECT
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This is an application for a program that's primary objectives are: 1) To increase the number of well-prepared students enrolled in a Historically Black College (HBC) who can compete successfully for entry into doctorate level or M.D. programs in disciplines related to alcoholism, drug abuse, and mental health; 2) To develop and strengthen psychology, social work, sociology/anthropology, bio-behavioral epidemiological prevention/intervention and/or public health curricula and research training opportunities in an institution with a substantial (95%) minority enrollment in order to prepare students for research careers related to alcoholism, drug abuse, and mental health; 3) To provide a pool of minority candidates for doctoral-level training leading to careers in alcoholism, drug abuse, and mental health; and 4) To provide a COR Honors Program in the Behavioral and Social Sciences which will serve as a goal and incentive for perspective young minorities who are members of those behavioral and Social Science disciplines which include: Psychology, Social Work, and Sociology/Anthropology.

GRANT NUMBER: 5 T32 MH19729-07
PROJECT DIRECTOR: HARKINS, STEPHEN G, PHD
ORGANIZATION: NORTHEASTERN UNIVERSITY
BOSTON, MASSACHUSETTS
TRAINING AREA: TRAINING BASIC RESEARCHERS, WITH EMPHASIS ON MINORITIES
(PREDOCTORAL)

DESCRIPTION (Applicant's Abstract): The program will train eight researchers, at the predoctoral level, across the broad spectrum of health-relevant behavioral science. The program is housed in an experimentally oriented (non-clinical) Department of Psychology, covering such research areas as cognition (with emphasis on language), psychobiology (with emphasis on psychopharmacology), sensory processes (with emphasis on vision), and social-personality. The trainees, with baccalaureate degrees in psychology or a related science, are recruited from among Ph.D. candidates in Northeastern's Department of Psychology and typically require from 4 to 5 years of training. Fully equipped laboratories in each area are available, together with supporting technical and office staff. Two distinctive features of the program are: 1) The Department has had considerable success in recruiting outstanding African-American and Hispanic students into its Ph.D. program. The mechanisms are in place to ensure that a substantial proportion of trainees will be from among groups currently underrepresented in scientific research. 2) Two Departmental faculty are the co-directors of the University's Center for the Advancement of Scientific Education, committed to the examination of "the ethical concerns and dilemmas about the process by which scientific knowledge is acquired, taught, and used." The courses and programs of the Center, and its extensive resources, are utilized to ensure that trainees are equipped to bring ethical perspectives to bear upon their scientific activities.

GRANT NUMBER: 5 T32 MH15780-19
PROJECT DIRECTOR: HARTER, SUSAN, PHD
ORGANIZATION: UNIVERSITY OF COLORADO AT DENVER
DENVER, COLORADO
TRAINING AREA: RESEARCH TRAINING IN DEVELOPMENTAL PSYCHOLOGY
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The objectives of this program are to train predoctoral and postdoctoral students in developmental theory and methodology to provide them with the skills necessary to become productive researchers and scholars in the field. The program continues to emphasize basic, theoretically-driven research training. However, the focus has been increasingly expanded to include a variety of applied issues and problems that command attention in the 1990's. Thus, students are provided with a grounding in theory and basic research that will provide them with the tools to address applied, as well as basic, issues. Five substantive (and overlapping) training areas are emphasized: (a) Cognitive and Perceptual Development, (b) Social and Emotional Development, (c) Developmental Psychopathology, (d) Analytic and Quantitative Approaches to Development, and (e) Developmental Neuropsychology. Within each area, the focus is on developmental processes and how they are manifested at different periods across the life-span. Moreover, there is an emphasis on development in context, with attention to the familial, cultural, social, and educational context in which development occurs. The contextual focus results in training opportunities with a variety of special populations, as well as intervention and program evaluation efforts. There are several training mechanisms: (i) collaborative research within facility laboratories, (ii) seminars, and (iii) participation in research groups. The predoctoral program is organized around a sequence of courses and research experiences that require from 4 to 5 years to complete the Ph.D. The program requires proseminars that insure a general knowledge of psychology, comprehensive exams that require width and depth within developmental psychology, a research tool (courses to enhance research skills in one's area of interest), a strong grounding in statistics, a Special Area Exam, as well as a master's thesis and doctoral dissertation. Students are encouraged to work with more than one faculty member in order to develop their appreciation for a breadth of theoretical and methodological approaches. For the postdoctoral program, the focus is on research as well as supplemental training in developmental psychology. Trainees participate in postdoctoral seminars that provide them with greater breadth and depth, and engage in other professional activities. For example, they serve on dissertation committees, review and prepare grant proposals, teach or co-teach a course, and receive clinical training that will enhance their applied research skills. Interaction among trainees and faculty is highly valued, in order to foster an atmosphere of collaboration.

GRANT NUMBER: 5 T32 MH16259-19
PROJECT DIRECTOR: HAUSER, STUART T, MD, PHD
ORGANIZATION: HARVARD UNIVERSITY/JUDGE BAKER'S CHILDREN'S CENTER
BOSTON, MASSACHUSETTS
TRAINING AREA: CLINICAL RESEARCH IN BIOLOGICAL AND SOCIAL PSYCHIATRY
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The Clinical Research Training Program (CRTP), now in its seventeenth year, offers intensive, interdisciplinary postdoctoral training in clinical research to outstanding psychiatrists (M.D.'s) and biological and behavioral scientists (Ph.D.'s). The primary objective of the program is to develop in trainees a sophisticated understanding of the research tools that are relevant to clinical research in psychiatry and in the behavioral sciences. Trainees study experimental design, scientific logic, and the intricacies of present day statistics and computer processing techniques in order to implement their own research. The multidisciplinary nature of the program (e.g., developmental psychology, neurophysiology) emphasizes the

importance of multiple perspectives in designing, conducting, and interpreting research findings. The program is oriented towards developing clinical investigators who will be ready, by the end of the two-year training period, to conduct their own independent clinical research, or to join already established clinical research teams as junior colleagues. Specific components of the CRTP are: 1) placement of each fellow in a clinical research training site with an ongoing, funded research program; 2) a weekly interdisciplinary research training seminar attended by fellows, visiting faculty, and other outstanding researchers in the area; and directed, as well as attended, by the co-directors and associate director of the program; and 3) attendance at relevant courses within the Harvard University complex and other Boston universities and hospitals. The multiple research areas included in the program build upon the research resources present within the Department of Psychiatry at Harvard, and include many research training sites. The primary (but not sole) training is through the fellow's ongoing work with his or her research preceptor in the relevant clinical research site. All fellows must participate in the program for two consecutive years. The trainees' experience and subsequent career trajectories reflect the strength of this program. Trainees have continued to obtain full-time and tenured positions at major universities, have shown a strong publication record, and have received numerous research awards including NIMH Career Development Awards. We believe that the strength and success of our program will continue, and that the field of psychiatry will greatly benefit from this rigorous, multidisciplinary training of a new generation of clinical research investigators.

GRANT NUMBER:	5 T32 MH19961-03
PROJECT DIRECTOR:	HENINGER, GEORGE R, MD
ORGANIZATION:	YALE UNIVERSITY NEW HAVEN, CONNECTICUT
TRAINING AREA:	CLINICAL NEUROSCIENCE RESEARCH TRAINING IN PSYCHIATRY (POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This training program is designed to meet the national goal of increasing the number of fully trained research psychiatrists in clinical neuroscience and psychopharmacology. In order to keep pace with the increasingly rapid progress in the basic sciences and recent improvements in clinical methods, this program will utilize a curriculum designed to give the trainee mastery of the fundamentals of basic neurobiology, neuropharmacology, and neuroimaging and their application to the clinical problems of psychiatry. At the core of the training program is a two-year Clinical Neuroscience Research Preceptorship with one or more of 14 senior clinical research faculty members who have a proven productive clinical research track record, and who are currently involved in intensive clinical neuroscience research in psychiatry. The rich training environment includes 3 institutions (Connecticut Mental Health Center, West Haven Veterans Affairs Medical Center, and Yale-New Haven Hospital) which support through the Department of Psychiatry 7 separate nationally funded programs of research including: 1) the Clinical Research Center for the Study of Mental Illness; 2) a Program Project on the Neurobiology of Major Psychiatric Disorders; 3) a Schizophrenia Research Center; 4) the National Center for Neurobiological Studies of Post-Traumatic Stress Disorder; 5) an Alcoholism Research Center; 6) a Neuroimaging Program that includes single photon emission computerized tomography (SPECT), positron emission tomography (PET), and magnetic resonance imaging (MRI); and 7) a Clinical Research Center for the Study of Opiate and Cocaine Addiction. In addition, the training program will utilize resources from other basic science programs within the Department and Medical School. Over the past twenty years, the institution and faculty who will support this training program have an outstanding record of training nationally prominent researchers in psychiatry. The application for new stipend support for trainees occurs at this time in order to take advantage of new opportunities derived from the recent expansion of the Clinical Neuroscience Research Training Program within the Department and the increasing ability to utilize new findings from basic neuroscience in the conduct of clinical research.

GRANT NUMBER: 5 T32 MH19098-08
PROJECT DIRECTOR: HERDT, GILBERT, PHD
ORGANIZATION: UNIVERSITY OF CHICAGO
CHICAGO, ILLINOIS
TRAINING AREA: CULTURE AND MENTAL HEALTH BEHAVIOR TRAINING PROGRAM
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The Program in Culture and Mental Health Behavior is dedicated to training students in the theory, methods, data collection and analysis necessary to conduct primary research on similarities and differences in psychological functioning across populations and ethnic communities. This Training Program is broadly concerned with study of environmental contexts and community sociocultural systems in which the person develops, and mental well-being or illness results. This Program highlights social and psychological forms through which mental distress and illness are classified, diagnosed, and treated; generally seeks to redefine the constitution and ontology of the patient; and augments the success of relevant healing processes as these are being rethought within the United States. Psychosocial functions of special relevance in the Program include the development of the emotions and moral reasoning, interpersonal functioning, mind functioning, gender and sexual development, and a variety of aspects of psychological well-being and psychopathology. Both optimal mental well-being and psychopathology have been studied in the preceding five years of training by faculty and students. Secondly, we are concerned with understanding community mental health and the understanding of ethnic factors and ethnicity more broadly in the care and delivery of services to immigrant and refugee populations within the Mexican-American and Puerto Rican communities in Chicago. Other ethnic populations under investigation by faculty and students involved in the Program include Japanese-Americans, Korean-Americans, African-Americans, and Chinese. Overall the program has two aims: to train research students who show special promise of contributing in creative and applied careers, and to understanding sociocultural and environmental predictors of mental health behavior and illness. The Program proposes to admit predoctoral students for four years, and postdoctoral fellows; Ph.D.'s and M.D.'s. Our current research and training opportunities include a large range of cross-cultural projects internationally as well as nationally, dealing with mental health, optimal development and psychosocial illness in cultures that span India, China, Japan, Korea, Brazil, New Guinea, Europe (Germany and Holland).

GRANT NUMBER: 2 R25 MH19918-06
PROJECT DIRECTOR: HEWITT, JOHN K, PHD
ORGANIZATION: UNIVERSITY OF COLORADO AT BOULDER
BOULDER, COLORADO
TRAINING AREA: METHODOLOGY OF TWIN STUDIES
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): There continues to be a marked growth in the use of twin and family study methods to address issues in the genetic epidemiology of mental health. Examples include studies of anxiety and depression, addictive behaviors, vulnerability to stress, disorders of childhood and adolescence, and mental functioning in old age. The investment in data collection has generated a need for investigators to become skilled in the most powerful, efficient and up-to-date methods of data analysis and experimental design. These methods include structural equation modeling employing maximum likelihood estimation for univariate and multivariate genetic analyses, analyses of longitudinal data, analyses of gender differences, the treatment of categorical data, how to deal with ascertainment bias, the extension of twin methodology to extended pedigrees, the incorporation into twin and family studies of measured genotypes (QTL analysis), and analyses of experimental power. To meet this need we have developed an intensive computer based workshop on the methodology of twin and family studies. The first workshop was held in Leuven, Belgium, in 1987. Since 1990, with the support of NIMH, five workshops have been held in Boulder, CO, with a total enrollment of 226 trainees. The workshop resulted in the publication of a special edition of the journal Behavior Genetics on the genetic analysis of twin data and a textbook, Methodology for genetic studies of twins and families, based on the workshops and written by the faculty, has become

the standard reference in the area. This proposal seeks funds to hold the Eleventh and successive annual International Workshops on the Methodology of Twin and Family Studies in Boulder, CO. So as to keep a balance between the needs of investigators being newly introduced to the methodology and more experienced researchers, we propose to alternate between an advanced workshop and an introductory workshop.

GRANT NUMBER: 2 T32 MH18264-15
PROJECT DIRECTOR: HOFER, MYRON A, MD
ORGANIZATION: COLUMBIA UNIVERSITY HEALTH SCIENCES
NEW YORK, NEW YORK
TRAINING AREA: RESEARCH TRAINING - PSYCHOBIOLOGICAL SCIENCES
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This program has been training M.D. and Ph.D. investigators for more than a decade to pursue research careers in the psychobiological sciences related to clinical disease. Clinical researchers and those working in the laboratory on animal models in the basic sciences are united by a common interest in the interplay of psychological and biological processes as these contribute to an increased understanding of clinical disease. We emphasize training in an analytic experimental approach to understand the processes or mechanisms underlying the development of abnormal states. Specific areas of research interest of the 20 faculty include: developmental psychobiology, neuroendocrinology, chronobiology, behavioral medicine, brain imaging, fetal and newborn physiology and behavior, prenatal drug effects, anxiety disorders, attachment and separation, psychosexual differentiation, and cardiovascular physiology. Training focuses on conducting research designed by the fellow with guidance from his/her mentor. This is supplemented with a weekly seminar in which the processes of research are intensively discussed, with a didactic program, and with medical school lectures and colloquia. A major emphasis is placed on becoming a successful independent researcher. We particularly view training in the design and writing of competitive grant proposals is an important part of this process. Funds are requested for postdoctoral trainees; the M.D.'s usually are psychiatric residents with 4 years or more postdoctoral experience, and the Ph.D.'s usually begin immediately following their doctorates. Selection is based on potential for original and creative research; self-starters with their own ideas are sought and then matched with Faculty in appropriate research areas. The motivation and perseverance required for 2-3 years of intensive research training are prerequisites. The training facilities are centered in the Department of Psychiatry, housed in New York State Psychiatric Institute, and also include the Department of Pediatrics and the Department of Anatomy and Cell Biology, all at Columbia University College of Physicians and Surgeons. Within New York State Psychiatric Institute, faculty members represent 8 different laboratories with research facilities available for trainees.

GRANT NUMBER: 5 T32 MH19128-10
PROJECT DIRECTOR: HOLLAND, JIMMIE C, MD
ORGANIZATION: SLOAN-KETTERING INSTITUTE FOR CANCER RESEARCH
NEW YORK, NEW YORK
TRAINING AREA: PSYCHIATRIC AND PSYCHOLOGICAL RESEARCH TRAINING IN AIDS
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This application seeks support for an established AIDS Research Training Program, offering training in psychiatric, psychosocial and behavioral research related to HIV/AIDS prevention and treatment in urban communities. The training program faculty are from the Psychiatry Service and the Social Work Research Unit of Memorial Sloan-Kettering Cancer Center, and the HIV Clinical Research Division of New York Hospital/Cornell University Medical Center. The application proposes to offer training to postdoctoral and predoctoral fellows. Trainees will work closely with faculty mentors on one of thirteen funded research projects. Trainees will also take part in a required AIDS Curriculum, including AIDS Grand Rounds,

Fellows' Seminar-Journal Club, AIDS Research Methods, Visiting Scholars, and Ethical Issues in AIDS. A required research ethics course and numerous electives are also offered. The proposed Training Program plans to coordinate minority recruitment with major doctoral programs in the New York area, to attract both pre- and postdoctoral fellows to HIV/AIDS research early in their careers.

GRANT NUMBER: 2 T32 MH15793-19
PROJECT DIRECTOR: HOPKINS, CARL D, PHD
ORGANIZATION: CORNELL UNIVERSITY, ITHACA
ITHACA, NEW YORK
TRAINING AREA: AN INTEGRATIVE APPROACH TO NEUROBIOLOGY AND BEHAVIOR
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This program supports interdisciplinary studies in the field of Neurobiology and Behavior at Cornell University. Funds will be used to support predoctoral trainees enrolled in the Graduate Field of Neurobiology and Behavior. Training will be done in laboratories, on field sites, and in seminars and classes at Cornell by core and associate faculty members engaged in Neurobiology or Behavior Research. The investigator's training faculty includes individuals who specialize in studies of neurobiology and behavior at many different levels of analysis including: (1) single unit electrophysiological studies of sensory processing; (2) electrophysiological studies of neural circuits; (3) studies of the anatomy of the central and peripheral nervous systems; (4) neuroethological studies of complex communication and orientation behavior; (5) studies of the development of the nervous system; and (6) mechanistic studies of animal behavior and evolutionary studies of animal social behavior. Trainees will receive advanced instruction in coursework and in labs in both neurobiology and behavior. Trainees will meet the diverse faculty in a first-year orientation course designed to acquaint students with the broad range of research subjects of the faculty. Trainees will do two laboratory rotations, one in behavior and one neurobiology, early in their graduate career. Field studies of the mechanisms of behavior are encouraged, both as rotations and as part of thesis research. Trainees will participate in two journal clubs, one in behavior and one in neuroethology and take part in an annual symposium where they will present summaries of their research progress to the training faculty. The proposal seeks to improve the current graduate program by providing a predoctoral stipend, travel funds, and supply funds for trainees to pursue full time research. Trainees will be selected in the first or second year of graduate study for support for one to five years; others will be selected from the more advanced graduate students for support from one to three years. Special efforts will be made to recruit minority candidates to the program both by establishing a broad faculty network for recruiting minority students and by establishing ties with four target schools with predominantly Black or Hispanic student bodies. The training grant will be administered by an executive committee of core faculty members and members of the Section and Graduate Field of Neurobiology and Behavior at Cornell. Trainee progress will be evaluated on an annual basis.

GRANT NUMBER: 5 T32 MH19956-04
PROJECT DIRECTOR: HOROWITZ, LEONARD, PHD
ORGANIZATION: STANFORD UNIVERSITY
STANFORD, CALIFORNIA
TRAINING AREA: TRAINING IN PERSONALITY AND EMOTION
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This program is designed to provide training for careers in basic research in personality and emotion. It emphasizes training in experimental methodologies, a focus on basic theory and psychological mechanisms, and broad integrative approaches to problems in personality and emotion. The training program generally requires four years beyond the Bachelor's degree. The curriculum includes a solid foundation in core courses and advanced seminars dealing with basic psychological mechanisms, supplemented by specialized seminars

that examine promising new theoretical and methodological advances in psychology. Students plan an individualized program of elective courses, in consultation with faculty, to acquire skills and background pertinent to their specific research interests. Some of these courses are taught by faculty in Psychology, and others are taught by faculty in departments and institutes outside of Psychology, such as the Law School, School of Education, or Psychiatry Department. Students begin their intensive training in research in the first year by means of a tutorial system in which each student collaborates closely with faculty members and receives continuous individual supervision. As their education progresses, students take increasing responsibility for originating and producing research studies. The research conducted by students and faculty focuses on basic psychological mechanisms governing individual differences in emotion and behavior, and on producing knowledge that will enhance the adaptation of humans to the vicissitudes of life. Specific research foci of the core faculty in the program include the role of perceived self-efficacy in health and illness; processes by which people adapt their emotion-regulation strategies to the goals and demands they face at different points in the life-span; the role of interpersonal styles or strategies in emotion-regulation; the cognitive bases of depression; the amplifying and rigidifying effects of emotion; the physiological, behavioral, and affective consequences of emotion suppression; the social cognitive processes of dispositionally happy people; the effects of emotion on memory and information processing; the primary role of affect in producing cognitive appraisals; the strategies that people use to maintain their self-esteem and sense of well-being when their minority status is known to be correlated with achievement; and the role of culture in the self-concept. The populations studied range from nursery school children to bereaved families to the very old. Students have access to numerous research settings both on the Stanford campus and in the surrounding community.

GRANT NUMBER:	5 T32 MH15783-20
PROJECT DIRECTOR:	HORWITZ, SARAH M, PHD
ORGANIZATION:	YALE UNIVERSITY
	NEW HAVEN, CONNECTICUT
TRAINING AREA:	TRAINING IN MENTAL HEALTH SERVICE SYSTEMS RESEARCH (POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This proposal requests funding for a training program in the theory and methods of mental health services and services systems research (MHSSSR) at Yale University. Over the past 10 years the program has educated 17 predoctoral fellows and 32 postdoctoral fellows. The vast majority of fellows are engaged in mental health services research. The program includes a two-year educational sequence for individuals with a doctoral level degree in clinical, administrative, social or behavioral sciences, and a four-year sequence for those undertaking a doctoral degree in public health. The proposed training program is designed to provide participants with the appropriate knowledge and skills to pursue careers in mental health services and systems research in both academic and nonacademic environments. The proposed training program will have two new themes: the organization, delivery and financing of mental health services for vulnerable segments of the United States population - the old, the young, the poor, the uninsured, the disabled, the homeless, substance abusers and the severely mentally ill - and the delivery of mental health services within non-specialty sector settings - medical, social services and educational systems. Current concerns about the cost and quality of care as well as barriers to care for vulnerable groups make these two loci critical for future mental health services researchers. The proposed training program at Yale has the benefit of having several high quality faculty members and multiple ongoing research opportunities in both of these areas. The proposed training program has 4 components: a faculty mentoring system, required and elective courses, participation in ongoing research, and clinical practice. The program is a joint collaboration of 4 Departments (Epidemiology and Public Health, Child Study Center, Psychiatry, and Pediatrics), and is based on the philosophy that interdisciplinary education is paramount for understanding the issues confronting mental health services in the U.S. The proposed program is structured so that students develop a main disciplinary framework in epidemiology, and then are exposed to the methods and content of other important disciplines such as services research, policy, sociology, and psychiatry. A revised Mental Health Services and Services Systems Colloquium provides fellows with a vehicle to develop substantive knowledge in mental health services, acquire the principles of scientific responsibility and the ethical conduct of research, interact with key figures in the public and private sector

mental health services systems, and present their ongoing work.

GRANT NUMBER: 5 T32 MH19105-10
PROJECT DIRECTOR: HULLEY, STEPHEN B, MD
ORGANIZATION: UNIVERSITY OF CALIFORNIA, SAN FRANCISCO
SAN FRANCISCO, CALIFORNIA
TRAINING AREA: TRAINEESHIPS IN AIDS PREVENTION STUDIES
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The application seeks support for a postdoctoral research training program in three areas that have high relevance for controlling the AIDS epidemic: behavioral medicine, epidemiology, and health policy analysis. The program, located at the Center for AIDS Prevention Studies (CAPS) at the University of California, San Francisco, will continue to prepare physicians and behavioral scientists, especially those with minority ethnic backgrounds, for academic and public health careers in the prevention of HIV infection and disease. Created in 1986, CAPS serves to promote, facilitate, and provide direct support for AIDS research by scientists based at UCSF and its three collaborating institutions: the San Francisco Department of Public Health, the Bayview-Hunters' Point Foundation (a community health care provider), and Communications Technologies (a survey research and social marketing organization). Center investigators are involved in more than 40 research studies and have established a very supportive research environment for training activities. In 1989, NIMH made a 5-year award to UCSF, now entering its last year, called Traineeships in AIDS Prevention Studies (TAPS). This program has admitted 26 postdoctoral trainees, of whom 8 (31 percent) are minority scientists (4 Latinos, 3 African Americans, and 1 Asian American). The TAPS program is a highly complementary addition to CAPS, with Center scientists and postdoctoral trainees interacting to the benefit of all parties. The trainees have been highly productive, as indicated by their publications list and by the excellent jobs in academia or public health of all seven TAPS graduates. This grant will make it possible (1) to complete the research training of the trainees admitted in the 1992 and 1993 cohorts and (2) to admit new trainees each year into the 2-3 year program. Trainees will spend their first summer participating in the Research Methods Workshop and becoming acquainted with the many research opportunities at CAPS. Each develops a strong affiliation with a research project and with a senior CAPS scientist. At the end of the program each trainee will have: completed an M.P.H. degree or its equivalent; taken advanced courses in research methods, and as appropriate, in statistics and other disciplines; participated in and led seminars and courses on research topics; designed several research protocols; completed at least one significant research project under the direction of a faculty preceptor; made several presentations at national or international meetings; and submitted several papers for publication.

GRANT NUMBER: 5 T32 MH19992-02
PROJECT DIRECTOR: HYDE, JAMES S, PHD
ORGANIZATION: MEDICAL COLLEGE OF WISCONSIN
MILWAUKEE, WI
TRAINING AREA: TRAINING IN FUNCTIONAL NEUROIMAGING
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The MCW has emerged as a leading academic research center in the development and application of fMRI. Since the inception of fMRI in 1992, a unique combination of facilities (including .05, 1.5 and 3.0 Tesla MRI scanners), research environment, engineering and scientific expertise have developed at MCW. A hallmark of fMRI research is the integrated, multidisciplinary approach to systems neuroscience together with expertise in MR physics and signal processing. The proposed Training Program in Functional Neuroimaging will provide predoctoral and postdoctoral training applying the tools of biophysics, applied mathematics and signal processing to basic and clinical problems in neuroscience. The proposed training program will

operate as a separate track within the Biophysics Graduate Program at MCW, an interdisciplinary Ph.D. program with many faculty in several departments. Currently, 10 of the 24 students in the program are performing MRI or fMRI research; the proposed program will increase student participation. Fifteen postdoctoral or medical fellows are currently training in fMRI with this program adding new positions over the training period. Primary training faculty, all with appointments in the Biophysics Graduate Program, will serve as predoctoral preceptors and postdoctoral mentors. Dr. James Hyde, Director of the Biophysics Research Institute and Chair of the Biophysics Graduate Program will serve as the Training Program Director, thereby assuring a high degree of administrative focus to the training program. Several well-established scientific experts will supplement the primary faculty by providing didactic, laboratory and/or clinical training to add breadth and depth to the program. Both primary and associated faculty will serve on a dissertation committee along with one external member of national stature. Three areas of research expertise and training have been identified: 1) basic and clinical systems neuroscience, 2) MRI signal acquisition, image analysis and signal processing and 3) microvascular cerebral regulation. The objectives of the training program are to prepare trainees for careers in research in systems neuroscience and functional neuroimaging; to provide trainees with knowledge and skills to identify and solve cutting edge problems in systems neuroscience; and to provide trainees with communications skills required for effective written and oral transmission of scientific information. A plan is described for evaluating the success of the program in meeting these objectives.

GRANT NUMBER: 5 T32 MH17069-16
PROJECT DIRECTOR: IACONO, WILLIAM C, PHD
ORGANIZATION: UNIVERSITY OF MINNESOTA, TWIN CITIES
MINNEAPOLIS, MINNESOTA
PROJECT TITLE: NEUROBEHAVIORAL ASPECTS OF PERSONALITY &
PSYCHOPATHOLOGY
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The emergence of a biological revolution in psychopathology research is now strongly solidified, leaving most clinical psychology students inadequately trained in biological concepts and methods, which contributes to a void of young, creative psychologists prepared to study psychopathology, normal personality, and personality disorders. Most graduate programs in clinical psychology are primarily oriented toward cognitive and psychosocial approaches to behavior. A training program that integrates behavioral neurobiology and behavior genetics in the study of psychopathology and personality, taking advantage of the unique perspectives on emotional-behavioral systems offered by psychology, is critically needed. Such a training program is proposed herein. Six components of a 2 year training program are described: 1) coursework in behavioral neurobiology, the structure of personality, concepts of behavioral genetics, and psychopathology; 2) 2-year association with one lab for apprenticeship training in research; 3) participation in research seminars led by training program mentors; 4) a lecture series composed of invited scholars and a year-end research conference featuring student presentations; 5) a neuropsychology practicum; and 6) travel to national conferences to present research findings. Several years of support is sought for predoctoral positions. Trainees are selected from our clinical psychology doctoral program, most at the conclusion of their second year of graduate study. The success of the training program is documented by the publication productivity of trainees and their securing of post-doctoral appointments indicative of continuing development as research scientists.

GRANT NUMBER: 5 T32 MH18399-13
PROJECT DIRECTOR: IRWIN, MICHAEL R, PHD
ORGANIZATION: UNIVERSITY OF CALIFORNIA, SAN DIEGO
SAN DIEGO, CALIFORNIA
TRAINING AREA: FELLOWSHIP: CLINICAL PSYCHOPHARMACOLOGY &
PSYCHOBIOLOGY
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): UCSD Fellowship in Clinical Psychopharmacology and Psychobiology is a highly productive program for the training of research, academic psychiatrists. This program has taken optimal advantage of the active research faculty in the Department of Psychiatry and produced over nearly two decades of training, multiple outstanding clinician-scientist psychiatric researchers such as Drs. S. Craig Risch, Robert Gerner, John Lisansky, William Byerley, Barbara Parry, and Renee Dupont. The diverse and active research programs in the Department of Psychiatry at UCSD allow for a superb combination of one-on-one supervision of psychiatric fellows by very active and highly productive research supervisors, a series of closely supervised clinical learning experiences and ever-evolving series of didactic research educational experiences carried out through inpatient and outpatient research rotations on the NIMH Mental Health Clinical Research Center and the NIH General Clinical Research Center at UCSD. These training opportunities along with the implementation of scientific review processes of fellows' research progress by senior basic and clinical scientists of the UCSD Department of Psychiatry optimize the ability of research trainees to achieve discrete and measurable goals through fellowship training. The strengths of the investigator's nationally recruited trainees coupled with assets of the training faculty combine to facilitate the production of research as measured by applications to human or animal research subjects committees, presentations at national and international meetings, publication of research articles, and competition for research funds. The majority of graduates from this program successfully continue research training and many have accepted positions as faculty and emerged as outstanding independent investigators with tenure in research oriented departments.

GRANT NUMBER: 5 T32 MH15801-19
PROJECT DIRECTOR: JACKSON, JAMES S, PHD
ORGANIZATION: UNIVERSITY OF MICHIGAN AT ANN ARBOR
ANN ARBOR, MICHIGAN
TRAINING AREA: SOCIAL PSYCHOLOGY
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This institutional training grant is from the Social Psychology Program at the University of Michigan, which is among the largest social psychology training programs in the United States. The goal and rationale of this application is to support a program that emphasizes the following research interests: (1) social cognition and perception; (2) the social psychology of minorities, particularly African-Americans; (3) culture, cognition, and social conflict; (4) cognitive, structural, and emotional bases of stereotyping and prejudice; and (5) violence and aggression. The research interests of the faculty span a breadth of research methodologies, with some emphasizing more traditional experimental social psychology, and others emphasizing field methodologies and more sophisticated data analytic techniques. The faculty represent this range of interests and, with few exceptions, have healthy overlaps among their areas, thus showing a great deal of collaborative efforts. Several research/reading groups exist in the training program that provide students and faculty with a forum for discussing various vantage points on social problems. In addition to considerable overlap within the training program, the social psychology faculty also overlap and communicate with numerous faculty outside of both their training program and their department. Dick Nisbett and Hazel Markus, from the Social Psychology Training Program, along with Lawrence Hirschfeld, an anthropologist, head the Culture, Cognition, and Social Conflict Group. This group incorporates anthropologists, developmental psychologists, cognitive psychologists, sociologists, and political scientists. The Prejudice and Stereotyping Group includes faculty from the Sociology Department and the School of Social Work. The

Violence and Aggression group has developmental psychologists, personality psychologists, social psychologists, and faculty from the School of Communications. Finally, an Evolution and Human Behavior Group, new since the last application, includes Psychologists, Biologists, and Anthropologists. A new goal is to strengthen a Joint Program in Social Work and Social Psychology. This goal is related to a larger goal of the program aimed toward an interdisciplinary perspective that provides students with opportunities to address real-world experiences with at-risk populations and then return to higher education with insights that would otherwise not be available. Another goal is to become broader in the training within social psychology. The program has instituted a year-long general seminar covering an exhaustive list of influential writings in the field, culminating in a half-day preliminary examination. A third goal, new to this application, is to deal with issues of multi-culturalism, both as a research topic and as an issue in training and relationships among faculty and students.

GRANT NUMBER: 5 T32 MH19934-05
PROJECT DIRECTOR: JESTE, DILIP V, MD
ORGANIZATION: UNIVERSITY OF CALIFORNIA, SAN DIEGO
SAN DIEGO, CALIFORNIA
TRAINING AREA: FELLOWSHIP IN GERIATRIC MENTAL HEALTH
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The proposed Fellowship Program in Geriatric Mental Health at the University of California, San Diego (UCSD) is designed for outstanding postresidency psychiatrists and postdoctoral fellows (Ph.D. or Pharm.D.) who are clearly suited for an academic research career. In addition, a slot will be devoted to the summer training of medical students in order to develop a "pipeline" for future fellows. Fellowship opportunities will exist in clinical, basic, and applied services focusing on the treatment, prevention, and nature of major mental disorders and behavioral dysfunctions in late life. The fellowship program will function as a major component in the NIMH-funded Clinical Research Center (CRC) on Late-Life Psychosis and the Use of Antipsychotics. The applicant perceives the strengths of the proposed program as including: an outstanding faculty actively involved in training; a scientifically rich environment; excellent potential for producing future academicians; and the uniqueness of the resources and environment within which the program is housed. The proposed program will provide training in a range of areas related to geriatric mental health in an environment where the history of both prior collaboration and prior training success is well established. Individualized mentoring will be provided to each trainee, in addition to group seminars, including those on ethics. A particular emphasis will be placed upon recruiting and training women and minorities. The ultimate goal of the fellowship program is to produce a cadre of young academicians who will perform research related to geriatric mental health and who will also train additional leaders in the future.

GRANT NUMBER: 5 R25 MH19946-04
PROJECT DIRECTOR: JESTE, DILIP V, MD
ORGANIZATION: AMERICAN ASSN FOR GERIATRIC PSYCHIATRY
GREENBELT, MARYLAND
TRAINING AREA: SUMMER RESEARCH INSTITUTE IN GERIATRIC PSYCHIATRY
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This is an application for a Summer Research Institute in Geriatric psychiatry. This Summer Institute, under the auspices of the American Association for Geriatric Psychiatry (AAGP), is designed for twenty-five promising post-residency (M.D. or D.O.) and post-doctoral (Ph.D. or Psych.D. or Pharm.D.) Fellows as well as a limited number of residents and junior faculty persons who have a strong potential for a successful research career in geriatric psychiatry. The annual one-week long Summer Institute will focus on the tools needed to begin, maintain and succeed on this career path. It will be offered at selected sites; up to five sites will host

the Institute over the five-year period (one-site per year). The Institute will include one-to-one mentoring as well as group seminars and workshops. There are plans for continued communication between trainees and mentors after the Institute, including workshops at annual meetings of the AAGP. For the field of geriatric psychiatry research, the goals of the Summer Institutes are; 1) to increase the number of talented individuals in the "pipeline" of developing investigators; and 2) to broaden the base of geriatric psychiatry research by making research careers more accessible to clinical trainees and junior faculty members from institutions that do not currently have active programs of research in this field. For participating trainees, the goals are; 1) to increase general knowledge of what research involves and motivation for a research career in geriatric psychiatry; 2) to provide knowledge regarding current issues and methods in geriatric psychiatry research; and, 3) to foster relationships with established investigators who can work with trainees over the longer term as mentors or consultants, and among the cohort group of developing clinical-investigator to facilitate peer support and collaborative research. The strengths of this proposal are: the need for this type of training mechanism; the resources available at various potential host sites; the training experience of the PI and the Co-PI; the collaborative experience of many institutions interested in participating in the Summer Institute; the proposed recruitment and selection criteria for the Summer Institute, as they strongly encourage the participation of women and minorities; input from an External Advisory Group and an Executive Committee comprised of senior scientists from different centers; the evaluation mechanisms proposed; and the overall administrative structure, including an experienced Institute-Manager. It is the ultimate goal of the Summer Institute to increase the number of qualified new scientists in the field of geriatric psychiatry.

GRANT NUMBER: 5 T32 MH18030-15
PROJECT DIRECTOR: JOHNSON, KENNETH O, PHD
ORGANIZATION: JOHNS HOPKINS UNIVERSITY
BALTIMORE, MARYLAND
TRAINING AREA: BEHAVIORAL AND NEURAL SCIENCE TRAINING PROGRAM
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The purpose of this program is to train doctoral students for careers in teaching and independent research in behavioral and neural science. Its goal is to ensure that candidates for the Ph.D. or combined M.D./Ph.D. degrees obtain a solid, broad background covering systems, cellular, and molecular approaches to neuroscience and neuropsychiatric disorders while simultaneously receiving the training and support to conceive and execute research at the forefront of their discipline. The program utilizes the large, diverse faculty working in neuroscience at Johns Hopkins. Students explore research opportunities through a series of laboratory rotations and form the basis for formulating research questions in a sequence of core courses coupled with weekly seminar and journal club series. Research areas covered in the program include neurophysiology; anatomy; chemistry; pharmacology; behavioral biology; psychophysics; neuropsychiatric disorders; drug addiction; neurotoxicology; molecular, cellular, and developmental neurobiology; sensory transduction; and membrane biophysics. Students are guided by individualized advisory committees, which report to a Student Progress Committee. They prepare a written research proposal and defend it orally before taking a comprehensive oral exam. The program matriculates several students each year and has achieved a size of 40-50 students. Approximately equal numbers of trainees are in the Ph.D. and M.D./Ph.D. programs; virtually all have solid undergraduate science backgrounds. Training is provided by faculty with primary appointments in the departments of Neuroscience, Biological Chemistry, Biomedical Engineering, Medicine, Molecular Biology and Genetics, Neurology, Ophthalmology, Pathology, Pharmacology and Molecular Sciences, Otolaryngology, Physiology, and Psychiatry and Behavioral Sciences. State-of-the-art laboratories, study space for students, seminar rooms, and libraries are located in contiguous adjacent buildings in the Medical School complex.

GRANT NUMBER: 5 T32 MH15742-19
PROJECT DIRECTOR: JONES, JAMES M, PHD
ORGANIZATION: AMERICAN PSYCHOLOGICAL ASSOCIATION
WASHINGTON, DISTRICT OF COLUMBIA
PROJECT TITLE: MINORITY FELLOWSHIP PROGRAM IN PSYCHOLOGY
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The major goal of this program is to increase the numbers of research psychologists who are from and/or who have research interests directed at underrepresented racial/ethnic groups. This application seeks support for a Research Training grant that has been funded by NIMH for the past 18 years. The present application proposes an expansion of the current training in predoctoral traineeships in psychology, and additional traineeships designated specifically for AIDS research training. We have supported a total of 184 trainees of whom 101 (55 percent) earned their doctoral degrees. For trainees entering prior to 1985, the rate of degree completion is 94 percent. Only 11 trainees have abandoned pursuit of their degree for a 6 percent attrition rate. Trainees are in top research psychology training programs in the country, and work with mentors who are among the most productive in their fields. The program has developed a detailed tracking system for all trainees and proposes to augment this communication network with enhanced electronic capabilities including an Internet MFP Homepage, email and Listserve networks. Annual activities at the APA Convention and regional psychological association programs will continue to be sources of professional development and mentoring for trainees. At the APA Convention, we specifically conduct new trainee orientations and sponsor a symposium for new Ph.D.'s to present their dissertation research. We propose to add symposia and workshops on AIDS research, as well as seminars on the responsible conduct of research in psychology to our convention activities. We expect that with increased funding support, and continued strong application rates, we will continue to contribute to the development of ethnic minority psychologists who have a strong research emphasis, and to the cumulative body of research that explores psychosocial mechanisms of behavior in these ethnic/racial populations.

GRANT NUMBER: 2 T32 MH14257-24
PROJECT DIRECTOR: JONES, LAWRENCE E, PHD
ORGANIZATION: UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN
CHAMPAIGN, ILLINOIS
TRAINING AREA: QUANTITATIVE METHODS FOR BEHAVIORAL RESEARCH
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This program provides predoctoral and postdoctoral research training for psychologists specializing in research design, mental measurement, statistical methods, decision making, program evaluation methods, and assessment of individual differences. In the case of the latter, it is applied to investigations of behavioral and mental disorders. The specialists in this program (a) contribute to graduate training of students in all areas of psychology by their research and teaching activities, and (b) act as investigators or consultants in research on basic processes, psychopathology, and related problems. Some trainees have joint majors in quantitative methods and substantive problem areas, such as clinical, developmental, or cognitive psychology. Others specialize in psychological assessment, behavioral statistics, and modeling with the aim of developing new methods or improving existing methods for investigating all kinds of psychological phenomena, including basic cognitive, affective, social, and psychophysiological processes. Courses in this curriculum include multivariate analyses, measurement of theory, experimental design, and personality assessment. Seminars on advanced topics include structural equation models, multidimensional scaling, cluster analyses, combinatorial methods of data analysis, and analysis of categorical data. Most predoctoral students complete a minor in mathematics, statistics, or computer science. Trainees collaborate with faculty in relevant laboratory and field research projects. Examples of recent research projects include: the structure of interpersonal perception in disturbed families and the measurement of affect intensity as an individual difference characteristic. Dr. Lawrence E. Jones is Program Director. There are 11 faculty members in the program who teach relevant courses and supervise trainee research.

GRANT NUMBER: 5 T34 MH19940-03
PROJECT DIRECTOR: JONES, REGINALD L, PHD
ORGANIZATION: HAMPTON UNIVERSITY
HAMPTON, VIRGINIA
TRAINING AREA: HAMPTON COLLABORATIVE RESEARCH TRAINING MODEL
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The primary goal of the NIMH Career Opportunities program is to strengthen research and research experiences in scientific disciplines related to mental health in order to increase the number of well qualified minority students competing for Ph.D. and M.D. graduate programs. In order to meet this goal Hampton University, an Historically Black University, is submitting this Collaborative Research Training Model for the behavioral sciences. The Hampton Collaborative Research Training Model is organized around four Hampton based research programs that are each associated with conceptually related, well-established satellite research facilities across the nation. Close collaboration among all research and educational entities that make up this program including the four Hampton based research projects, the satellite research facilities, program management and the COR Scholar educational curriculum will ensue the development and integration of the competencies and skills required to perform research activities at Hampton and at the summer satellite placements. The cornerstone of our program is the active participation of all of the COR Scholars during the academic year in on-going Hampton based research projects and summer placements in longstanding programs of nationally recognized researchers at major universities across the nation. Scholars will participate in all four of the Hampton based research projects through research seminars, literature research and review presentations, research proposal development, training, and supervision interactions with project staff, all data collection and analysis and research report writing and development of conference presentations during their two years in the COR Scholars Program. The existing Honors curriculum will be augmented by 30 semester hours for COR Scholars to complete advanced training orientation to mental health research, computer technology related to mental health research, honors sections in research methodology and statistics courses, and the intense research supervision and mentoring with Hampton-based as well as satellite research preceptors. Participants will be undergraduates who have completed two full years in psychology or sociology with a GPA of 3.0 or better and give evidence through their academic work that they can successfully pursue and complete advanced behavioral science research or medical advanced degrees. Simultaneously, with this COR proposal, we are preparing for submission a M-RISP grant to further our efforts in faculty development, thus providing an integrated program of collaborative faculty development, student research training and funded research implementation at Hampton University.

GRANT NUMBER: 5 T34 MH16891-17
PROJECT DIRECTOR: JUNG, JOHN R, PHD
ORGANIZATION: CALIFORNIA STATE UNIVERSITY
LONG BEACH, CALIFORNIA
AREA TRAINING: NIMH COR HONORS UNDERGRADUATE RESEARCH TRAINING
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This is an application for the successful NIMH COR Undergraduate Honors Research Training Program started in 1981 at California State University, Long Beach to increase the number of minority researchers in areas of concern to NIMH. The record of accomplishments over the three previous 5-year funding periods indicates that the percentages of trainees entering advanced training are on a par with other COR Programs and have increased from 60 to 73 to 79 percent over successive funding periods. This program involves only the Department of Psychology, continuing the unidisciplinary emphasis approved in the original application. However, within the Psychology curriculum requirements, trainees are required to have breadth of training in the biobehavioral and psychosocial aspects of the discipline. The COR Program centers around a 2-hour

weekly honors seminar for the junior and senior years, allowing 8 academic units over two years, and enriches the regular course requirements for the psychology major. Seminar goals include the exposure of trainees to a graduate school atmosphere, with discussion of seminal articles as well as oral and written presentations of their own research. Training is provided in areas such as: literature searches of computer bibliographic databases, computer statistical packages such as SPSS, and familiarity with computer applications such as spreadsheets, graphical software, and databases. Trainees receive counseling and guidance regarding graduate school applications, as well as GRE preparation. They attend colloquia and professional conferences, have a research assistantship with a faculty mentor, and conduct independent research projects each year. There are two summer research internships of 8-10 weeks, with the pre-senior year summer spent at another university. Minority students with a minimum GPA, courses in research methods and statistics, and a commitment to attending graduate school are recruited. Selection of new students by the program director, in consultation with the Steering Committee, is based on grades, interviews, instructor recommendations, and the match between applicant's career goals and the program aims.

GRANT NUMBER: 5 R25 MH56851-02
PROJECT DIRECTOR: JUNG, JOHN R, PHD
ORGANIZATION: CALIFORNIA STATE UNIVERSITY, LONG BEACH
LONG BEACH, CALIFORNIA
TRAINING AREA: NIMH COR HONORS HIGH SCHOOL RESEARCH EDUCATION
(HIGH SCHOOL)

DESCRIPTION (Adapted from Applicant's abstract): This application for a Career Opportunities in Research Education and Training (CORET) Program for high school students covers the junior and senior years. It will recruit four minority high school honors students with interests in the social sciences who will be introduced to the nature and importance of scientific approaches to the study of psychology. A six week summer program following the sophomore year involves a set of hands on observational activities to demonstrate the advantages of scientific methods in understanding psychological phenomena. In the junior academic year, students will come on campus once a week to observe and participate in ongoing faculty directed research projects in addition to working on learning activities that teach the principles of research. During the second summer, students will be guided in the preparation of an independent research project application which will be completed during the senior academic year under the supervision of a faculty mentor. Findings will be presented in poster and oral format at a ceremony with parents, family, and high school and university faculty and administrators in attendance.

GRANT NUMBER: 5 T34 MH19099-10
PROJECT DIRECTOR: KAMEOKA, VELMA, PHD
ORGANIZATION: UNIVERSITY OF HAWAII AT MANOA
HONOLULU, HAWAII
TRAINING AREA: NIMH COR HONORS UNDERGRADUATE RESEARCH TRAINING
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This proposal addresses needs for programmatic efforts to train minority undergraduate students at the University of Hawaii for research careers in social work, psychology, and nursing. The long-term goal of the proposed program is to increase the currently limited pool of minority scientists capable of contributing to the research mission of NIH-NIMH. Specific program objectives include: provision of quality training in conceptualizing meaningful research questions, conducting literature reviews, research design principals, data-gathering methods, statistical analyses and interpretation, computer data processing, and oral and written presentations of empirical studies. Training program components include: formal courses and supervised "hands on" research experience during the students' junior and senior years, a summer research program [typically at another university], a colloquium series for CORE students, attendance at professional meetings, research

presentations, and a student support service. The program publishes a MARC journal [supported by the University's Office of Student Affairs] in which students' research may be published. The purpose of this journal is to reinforce students' efforts in developing skills and attitudes necessary for success in the academic and scientific profession. Students will be recruited during the freshmen and sophomore years, although their actual participation does not begin until the junior year. Criteria for selecting CORE students include: 1) college GPA of 3.5 and a social science GPA of 3.5; 2) letters of recommendation; 3) personal interview with the CORE Steering Committee; 4) ability and motivation to use the CORE training opportunity fully and to meet the requirements for a research career; and 5) other factors that include unusual ability or talent for a research career. Based on criteria and procedures specified in this proposal, CORE students will be classified into one of three groups: 1) CORE Scholars; 2) CORE Associates; and 3) CORE Inceptors. To ensure the integrity and success of the proposed program, a system for recruitment, retention, and tracking CORE students is presented. The central CORE office is located in the School of Social Work and space for CORE scholars has been provided. Major program responsibilities will be assumed by the project's co-directors and other program responsibilities, by the CORE Advisory / Steering Committee. Health content in the CORE curriculum is related to the national health promotion and disease prevention objectives.

GRANT NUMBER: 2 T32 MH19729-07
PROJECT DIRECTOR: KAMIN, LEON J, PHD
ORGANIZATION: NORTHEASTERN UNIVERSITY
BOSTON, MASSACHUSETTS
TRAINING AREA: TRAINING BASIC RESEARCHERS, WITH EMPHASIS ON MINORITIES
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This program is designed to train researchers at the predoctoral level, across the broad spectrum of health-relevant behavioral science. The program will be housed in an experimentally oriented (non-clinical) Department of Psychology, covering research areas such as cognition (with emphasis on language), social-personality, psychobiology (with emphasis on psychopharmacology), and sensory processes (with emphasis on vision). The trainees, with baccalaureate degrees in psychology or a related science, will be recruited from among Ph.D. candidates in Northeastern University's Department of Psychology. Fully equipped laboratories are available in each research area, together with supporting computer services, and technical and office staffs. There are two distinctive features of the program: 1) The Department has had considerable success in the past couple of years in recruiting outstanding Black and Hispanic students into experimental Ph.D. programs. The mechanisms are in place, and the commitment exists, to ensure that a substantial proportion of trainees will be from among groups currently underrepresented in scientific research. 2) Two Department faculty members are Co-Directors of the University's Center for the Advancement of Science Education, committed primarily to the examination of "the ethical concerns and dilemmas about the process by which scientific knowledge is acquired, taught, and used." The courses and programs sponsored by the Center's staff will be utilized to ensure that trainees are equipped to bring ethical perspectives to bear upon their scientific activities.

GRANT NUMBER: 5 T32 MH14235-24
PROJECT DIRECTOR: KASL, STANISLAV V., PHD
ORGANIZATION: YALE UNIVERSITY
NEW HAVEN, CONNECTICUT
TRAINING AREA: RESEARCH TRAINING IN MENTAL HEALTH EPIDEMIOLOGY
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The broad purpose of the program is to provide advanced research training in two areas of epidemiology: 1) psychosocial, defined by interest in social and psychological risk factors for physical health outcomes; and 2) psychiatric, defined by interest in a variety of mental health

outcomes. Within psychiatric epidemiology, research training is offered in both adult and child mental health outcomes, in substance abuse issues, and in genetic approaches. These areas of training, however, are not distinct and separate; they overlap and intertwine.

GRANT NUMBER: 1 T32 MH20021-01
PROJECT DIRECTOR: KATON, WAYNE J, MD
ORGANIZATION: UNIVERSITY OF WASHINGTON
SEATTLE, WASHINGTON
TRAINING AREA: INSTITUTIONAL NATIONAL RESEARCH SERVICE AWARD (T32)
(POSTDOCTORAL)

DESCRIPTION (Applicant's abstract): This program is designed to train physicians for academic research careers aimed at improving recognition and management of mental health problems encountered in primary medical care settings. The program recruits physicians in psychiatry and family medicine for a minimum of a 2-year fellowship. Fellows will be mentored by senior researchers in the Departments of Family Medicine and Psychiatry and the Center for Health Studies at Group Health Cooperative who are at the cutting edge of research in the interface of medicine and psychiatry. The training program will be two years in duration and will include 4 components: 1. A Master of Public Health degree program, 2. Research experience in mental health problems in primary care settings, 3. Experience with a mentor who serves as a role model as a teacher, researcher and clinician in the interface of medicine and psychiatry, 4. Clinical experience providing behavioral science consultations and teaching to residents in a primary care clinic. One fellow will be admitted to the program each year so that two fellows (one first and one second year) will be in the program at any given time. Faculty Supervisors will include senior investigators in the Departments of Psychiatry and Behavioral Sciences and Family Medicine, the Center for Health Studies Group Health Cooperative and the School of Public Health.

GRANT NUMBER: 5 T32 MH19931-05
PROJECT DIRECTOR: KATZ, IRA R, PHD
ORGANIZATION: UNIVERSITY OF PENNSYLVANIA
PHILADELPHIA, PENNSYLVANIA
TRAINING AREA: NRSA TRAINING/ PSYCHIATRIC MEDICAL COMORBIDITY IN AGING
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): A multidisciplinary program is proposed for postdoctoral research training with a focus on the comorbid psychiatric and medical disorders in late life. The program is to be administered by the section on geriatric psychiatry at the University of Pennsylvania, with participation of faculty from psychiatry, medicine, and nursing at Penn, and from the research department of the Philadelphia Geriatric Center (PGC). The program will include both long-term (1 or 2 year) postdoctoral research fellowships and shorter term training for purposes of research recruitment for candidates who are clinicians (physicians, nurses, or clinical psychologists), or Ph.D. investigators with backgrounds in biological, behavioral, or social science. The training program consists of a number of components, each directed by senior scientists with ongoing funded research. The components include clinical psychiatry, ethnicity in aging, geriatric medicine, geriatric psychopharmacology, neuroimaging, neuropsychology, neuropsychopharmacology, nursing, psychology and aging, and sleep and circadian rhythm research. The program arises from a faculty that is actively involved in research in the mental health and mental disorders of late life in general, and more specifically, in issues on research related to psychiatric/ medical comorbidity through an extensive portfolio of funded research activities including an NIMH Clinical Research Center on the psychopathology of the elderly.

GRANT NUMBER: 7 T32 MH19836-03
PROJECT DIRECTOR: KEANE, TERENCE, PHD
ORGANIZATION: TUFTS UNIVERSITY
BOSTON, MASSACHUSETTS
TRAINING AREA: POSTDOCTORAL TRAINING IN POSTTRAUMATIC STRESS DISORDER
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The purpose of the proposed training program is to train independent clinical researchers. Candidates will be Ph.D. clinical psychologists from accredited programs who have already completed a predoctoral internship. The program for each fellow is two years long, with required courses on conceptual models of PTSD, assessment and treatment of PTSD, ethical issues in conducting clinical research, methods and statistics, grant writing, cultural and minority issues, trauma and health, psychopharmacology, and neuroscience, including neuropsychology and neurometrics. Fellows will also receive clinical training in individual and group treatment of PTSD. The later part of the program follows an apprenticeship model, and the fellows learn by immersing themselves in the research experience with active investigators. They will receive applied research training by having a primary mentor with whom they work. They will prepare review papers, conduct a study, and prepare a grant proposal. Ongoing discussion groups supplement the other experiences, and a journal club component has been added. Their mentor evaluates candidates on a routine basis, by formal evaluation of their products, and by meetings with the program director, if necessary.

GRANT NUMBER: 2 T32 MH18834-11
PROJECT DIRECTOR: KELLAM, SHEPPARD, MD
ORGANIZATION: JOHNS HOPKINS UNIVERSITY
BALTIMORE, MARYLAND
TRAINING AREA: PREVENTION RESEARCH TRAINING IN MENTAL HEALTH
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): Funding is requested to support predoctoral and postdoctoral fellowships in a Prevention Research Training Program that began in 1988. The program is aimed at increasing the number of university faculty and research staff in mental health agencies who can develop, implement, evaluate, and teach prevention research. Opportunities for independent research within the context of the Johns Hopkins Prevention Research Center and participation in the Center's ongoing research foster a collegial environment for flexibly pursuing various training objectives and career goals. The orientation of the training program is toward developmental epidemiologically-based prevention research that focuses on developmental paths and vulnerability across the life span and on variation in populations, their environment, and their interaction as explanations of outcomes. This orientation has guided the Prevention Research Center, which has been a primary setting for training in school-based preventive trials directed at reducing proximal risk factor targets and determining effects on more distal mental health target outcomes. This orientation also guides the preventive trials in our research programs on AIDS prevention behavior, alcohol and drug abuse problems, and childhood injury. Training is specifically designed to help fellows develop substantive knowledge and experience in six core areas of prevention research, but we design each trainee's program to suit individual backgrounds, abilities, and interests. The six areas are: (1) developmental epidemiology from a life-course perspective; (2) intervention theory and monitoring; (3) community and institutional sanction and base-building; (4) prevention trial design; (5) multi-stage sampling and assessment methods; and (6) data analytic methods for evaluation of prevention trials. Mechanisms of training include course work as needed, participation in preventive intervention research programs, and mentoring, with the added benefits of interdisciplinary collaboration with a number of professional organizations. The program fosters cooperative efforts across research sites developing a solid knowledge base of preventive theory and practice.

GRANT NUMBER: 5 T32 MH19985-03
PROJECT DIRECTOR: KELLY, JEFFREY A, PHD
ORGANIZATION: MEDICAL COLLEGE OF WISCONSIN
MILWAUKEE, WISCONSIN
TRAINING AREA: NRSA POSTDOCTORAL TRAINING PROGRAM IN HIV PREVENTION
RESEARCH
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This application requests support to establish an NRSA Institutional Research Service Award postdoctoral training program in HIV prevention studies at the Center for AIDS Intervention Research (CAIR) at the Medical College of Wisconsin. The program will offer a training to postdoctoral research fellows. CAIR's fellowship training program will especially seek to increase the number of women and minority scientists in the field, and to enroll postdoctoral fellows in a range of behavioral, social, and medical science disciplines. The objective of the planned program is to attract to the field and train postdoctoral fellows in key areas the investigators believe will be critical for advancing the science of HIV prevention. These areas include: (1) prevention studies with disenfranchised populations who are increasingly vulnerable to HIV/AIDS; (2) research to expand the repertoire of conceptual models to guide HIV prevention interventions and to expand the range in levels of prevention intervention; (3) methodological research undertaken to better assess the impact of HIV prevention intervention; (4) research to improve the transfer of HIV prevention technology and communication between HIV prevention researchers and community and public health entities concerned about AIDS; (5) research evaluating cost-effectiveness and policy implication of HIV behavioral research, ethics, and HIV foundation area seminars; and (6) training conferences. The program will especially emphasize ongoing research preceptorships and mentorships with experienced investigators in their multidisciplinary research center. This will be accomplished by initially involving fellows in major areas of research presently being conducted at CAIR including both individual and community-level HIV prevention trials with women, gay men, the at-risk homeless and severely mentally ill, adolescents, and other populations, as well as both qualitative and quantitative policy and methodology studies. The program will then structure experiences in which fellows initiate independent research projects, drawing upon CAIR's scientific and core resources for support.

GRANT NUMBER: 5 T32 MH19116-10
PROJECT DIRECTOR: KELSO, J A SCOTT, PHD
ORGANIZATION: FLORIDA ATLANTIC UNIVERSITY
BOCA RATON, FLORIDA
TRAINING AREA: TRAINING PROGRAM: COMPLEX SYSTEMS AND BRAIN SCIENCES
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This application seeks support for a unique pre- and postdoctoral Training Program in Complex Systems and Brain Sciences begun several years ago at Florida Atlantic University. The need for such a training program is based on the premise that if neuroscience is to take full advantage of recent theoretical developments in the emerging field of complex systems (especially the mathematical concepts and computational tools of nonlinear dynamics), then it must extend its traditional borders and create opportunities for a new breed of brain scientist to evolve - one who is theoretically oriented, mathematically sophisticated, and computer literate, yet comfortable with real experimental data. Since its inception, the interdisciplinary nature of the program has grown in breadth and depth. In particular: 1) seven core or preparatory courses have been specially developed in the area of neuroscience, nonlinear dynamics, and computation for Training Program fellows whose undergraduate degrees are from different disciplines; 2) the range of research opportunities and facilities for fellows has been expanded dramatically through the recruitment of new faculty whose primary assignment is to the Training Program; and 3) through a remarkable cooperative effort among Departments and with strong support from the

University Administration, the originally proposed plan for a Ph.D. degree in Complex Systems and Brain Sciences has been implemented.

GRANT NUMBER: 5 T32 MH14599-23
PROJECT DIRECTOR: KILLACKEY, HERBERT P, PHD
ORGANIZATION: UNIVERSITY OF CALIFORNIA, IRVINE
IRVINE, CALIFORNIA
TRAINING AREA: RESEARCH TRAINING IN BIOLOGICAL SCIENCES
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The objective of the Department of Psychobiology's training program is to provide high quality research training in neuroscience to selected graduate students. The purpose of this program is to train neuroscientists who will contribute to the PI's understanding of the basic biological processes underlying the complexities of human behavior and the major health problems associated with mental disorders. The program leads to a Ph.D. in Biological Sciences and provides a broad intellectual background in all aspects of neuroscience, coupled with high caliber research training in some aspect of neuroscience. The Department of Psychobiology is relatively unique in that it can offer balanced graduate training across the field of neuroscience with a relatively small number of faculty and within the confines of a single department. The training program has two foci. The first is the classroom and the second is the research laboratory. The classroom portion of the program emphasizes a core program for all students concentrating on the fundamentals of neuroscience and advanced courses and seminars tailored to the interests of individual students. Research training in faculty laboratories is the most essential element of the training program. A student is considered a "research apprentice" from the day he or she enters the program. All entering students are assigned a laboratory and expected to devote considerable time to a research project, as well as course work. As a student progresses, more time is devoted to research and less to formal class work. The normative time to the Ph.D. in this program is 5.5 years.

GRANT NUMBER: 2 T32 MH18869-11
PROJECT DIRECTOR: KILPATRICK, DEAN G, PHD
ORGANIZATION: MEDICAL UNIVERSITY OF SOUTH CAROLINA
CHARLESTON, SOUTH CAROLINA
TRAINING AREA: CHILD AND ADULT TRAUMA VICTIMS: A TRAINING PROGRAM
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The high prevalence of traumatic events and trauma-produced mental health problems requires investigators capable of conducting methodologically sophisticated yet clinically relevant trauma research needed by mental health professionals, public policy makers, and the research community. This program is designed to provide pre- and postdoctoral research training at a site that: (1) is actively involved in delivery of mental health services to trauma victims and their families; (2) engages in a broad spectrum of trauma research; and (3) addresses the public policy implications of its research findings. The goal of training is to produce researchers who are capable of using a variety of research strategies to investigate relevant topics in a manner that is both clinically relevant and useful from a public policy perspective. Trainees will participate in the following core training activities: (1) familiarization with ongoing research projects and methodologies; (2) supervised reading; (3) didactic seminar series; (4) clinical training; (5) attendance of research rounds and seminars; (6) supervision by a preceptor; and (7) development of an independent research project. Training will be provided at the Crime Victims Research and Treatment Center (CVC), a division of the Department of Psychiatry at the Medical University of South Carolina (MUSC). CVC core faculty come from two disciplines (clinical psychology and social work), and trainees are exposed to other disciplines (e.g., psychiatry, pediatrics) because of the CVC's location in the Department of Psychiatry. Previous trainees have come from several disciplines (clinical, school, counseling psychology, and

psychiatry). The trainees will receive specific training on the conduct of clinically relevant research focused on adult and child trauma victims. Major funded projects conducted over the past 5 years include studies of: (1) prevalence of traumatic events in representative community samples of adult women and their relationships with current mental health problems; (2) the criminal justice system response to adult and child victims of violent crime; (3) the efficacy of a hospital-based program to assist physically injured victims of crime; (4) treatment effectiveness with sexually abused children; (5) adult and adolescent reactions to natural disaster; (6) mental health problems and criminal justice system experiences of surviving members of homicide victims; and (7) posttraumatic stress disorder in adult and child victims of trauma.

GRANT NUMBER: 2 T32 MH18006-14
PROJECT DIRECTOR: KLEINMAN, ARTHUR M, PHD, MD
ORGANIZATION: HARVARD UNIVERSITY
BOSTON, MASSACHUSETTS
TRAINING AREA: TRAINING PROGRAM IN CULTURE AND MENTAL HEALTH SERVICES
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The training program described here is a pre- and postdoctoral training program begun at Harvard in 1984. The training program, located jointly in the Department of Social Medicine at Harvard Medical School and the Department of Anthropology of Harvard University, is designed to teach physicians and social scientists to conduct mental health services research, grounded in a paradigm of medical and psychiatric anthropology and clinically oriented social sciences. The overall program focuses on the role of culture in shaping the experience and interpretation of psychiatric conditions, care-seeking, clinical interactions, and health services. Particular attention is devoted to the study of services for minority group mentally ill persons and homeless mentally ill, to cross-cultural studies of mental illness and its treatment, to culturally distinctive forms of chronic somatization and its management in general health care settings, and to cultural dimensions of health services. Fellows are provided with an integrated set of seminars and research experiences to prepare them for careers in mental health services research and medical anthropology. This application proposes to support postdoctoral trainees (M.D. and Ph.D., usually psychiatrists and anthropologists) and predoctoral fellows from the graduate program in medical anthropology. We believe that given the successful functioning of our current program, the growth in faculty, and the level of applications to the current program, an increase in the size of the program is justified.

GRANT NUMBER: 5 T32 NS07430-02
PROJECT DIRECTOR: KOESTER, JOHN D, PHD
ORGANIZATION: NEW YORK STATE PSYCHIATRIC INSTITUTE
NEW YORK, NEW YORK
TRAINING AREA: NEUROBIOLOGY AND BEHAVIOR RESEARCH TRAINING PROGRAM
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): Support is requested for a recently organized program (the Doctoral Subcommittee in Neurobiology and Behavior at Columbia University), which provides integrated academic and research training leading to a Ph.D. in Neurobiology and Behavior. The nervous system is the most complex of all tissues, and understanding its biology has required the combined forces of several areas of modern science, including cell biology, biochemistry, developmental biology, molecular biology, pharmacology, physiology, ethology, and psychology. The educational requirements of this field can be difficult to meet if constrained by long-established requirements of traditional academic departments. Neuroscience faculty from throughout the university have therefore joined together to establish a university-wide, multi-disciplinary training program to meet the educational needs of predoctoral neuroscience students. The 48 faculty members include many leaders in various areas of neuroscience, whose research interests span the range from molecules to cognition. This broadly-based program provides coherent

training via a unified admissions process, curriculum, and training. Trainees will have access to the facilities and resources of the Center for Neurobiology and Behavior and the Departments of Anatomy and Cell Biology, Biochemistry and Molecular Biophysics, Biological Sciences, Genetics and Development, Neurology, Pathology, Pharmacology, Physiology and Cellular Biophysics, and Psychology. Four major areas of strength in training expertise are: 1) Biophysics and cell biology of neurons; 2) cognitive systems neurobiology; 3) neurobiology of behavior and learning; and 4) neural differentiation and development. Support will be provided for students during the first two years of training, which typically lasts 5-6 years.

GRANT NUMBER: 5 T32 MH15174-22
PROJECT DIRECTOR: KOESTER, JOHN D, PHD
ORGANIZATION: NEW YORK STATE PSYCHIATRIC INSTITUTE
NEW YORK, NEW YORK
TRAINING AREA: NEUROBEHAVIORAL SCIENCES RESEARCH TRAINING PROGRAM
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The purpose of this program, which is entering its 31st year, is to train pre- and postdoctoral students to do research on a variety of types of plasticity that influence the nervous system, including neuronal development, learning and motivational states, and alterations of brain and behavior due to disease processes. The neurobiological bases of these processes will be studied, emphasizing analyses of synaptic specification, control of gene expression, structure of the cytoskeleton, synaptic plasticity, organization of neural circuits, structure and gating properties of membrane conductance channels, neurochemistry of synaptic transmission, axonal transport and neuronal regeneration. A multidisciplinary approach will be taught that in many cases can be directed towards an analysis of these problems at the molecular level. Training will be offered in a variety of disciplines, including membrane biophysics, anatomy and cell biology, behavior, development, electrophysiology, molecular biology, neurochemistry, pharmacology, and physiology. Each student will be encouraged to become familiar with a variety of neurobiological disciplines, in order to instill a problem-oriented, as opposed to a technique-oriented, approach to science. Trainees will be encouraged to work on problems of fundamental importance to basic neural science, with the long-term goal that the resulting knowledge will someday be of importance in the prevention and treatment of neurological and psychiatric diseases. To this end, trainees will be familiarized with important issues in these clinical areas. The training faculty consists of several members of the Center for Neurobiology of Columbia University. The training program is built around the research and training activities and these faculty and the facilities of the Center. The members of the training faculty have a wide diversity of expertise, along with a shared interest in the mechanisms that underlie various forms of plasticity in the nervous system. Faculty members hold joint appointments in eight different basic science and clinical departments of the Medical School. There will be extensive collaboration between members of the training faculty in their research and in the training of pre- and postdoctoral students. Predoctoral trainees will select from a variety of basic science courses, laboratory rotations, and seminars, in addition to a core program of graduate courses in neurobiology. Each student will spend approximately 3-4 years completing a doctoral research project. Postdoctoral trainees also will participate in graduate courses and seminars. Their primary training experience will come in an intensive three year research program in the laboratory of one of the training faculty. All trainees in the program will take part in two seminar series, Plasticity in the Nervous System, and Neural Science and Human Behavior. The program will be broadly advertised at the national level, and a vigorous effort will be made to recruit women and members of underrepresented minority groups. Funds are requested for predoctoral and postdoctoral trainees.

GRANT NUMBER: 5 T32 MH17119-16
PROJECT DIRECTOR: LAIRD, NAN M, MD, PHD
ORGANIZATION: HARVARD UNIVERSITY
BOSTON, MASSACHUSETTS
TRAINING AREA: TRAINING IN PSYCHIATRIC EPIDEMIOLOGY/BIostatISTICS
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This is a request for support for the Harvard Training Program in Psychiatric Epidemiology and Biostatistics. The principle objectives of the training program are to educate pre- and postdoctoral students to become epidemiological and biostatistical scientists in psychiatric research. In this proposal, a request is made for predoctoral and postdoctoral trainees. This program is completing its 13th year as a program in Psychiatric Epidemiology, and its 5th year as a joint program in Epidemiology and Biostatistics. The joint training program initiated in 1991 has rapidly expanded and flourished under the leadership of Drs. Ming Tsuang and Nan Laird. This application is similar to the program in the previous five years and is a joint program. In particular, doctoral trainees typically will take two full years of coursework with a concentration either in Statistics or Epidemiology and often a minor concentration in the other field. In addition, each trainee must take a minor concentration in psychiatric epidemiology or an allied substantive field related to mental health. Doctoral students must pass a written and oral qualifying examination usually by the third year of doctoral studies. Upon completion of the oral exam, a research committee is formed of three faculty, generally with at least one faculty member from Biostatistics and one from Epidemiology. The postdoctoral training program in Epidemiology offers degree training to psychiatrists wishing to specialize in epidemiological research. Non-degree postdoctoral training is offered for Ph.D.'s with a solid training in epidemiology, biostatistics, or a related field who wish to specialize in mental health. An important part of the training for both predoctoral and postdoctoral fellows is attendance at regular seminars and colloquia in Psychiatry, Biostatistics, and Epidemiology and participation in placements providing hands-on experience in collaborative research in ongoing psychiatric research in the Greater Boston area.

GRANT NUMBER: 5 T32 MH19545-07
PROJECT DIRECTOR: LEAF, PHILIP J, PHD
ORGANIZATION: JOHNS HOPKINS UNIVERSITY
BALTIMORE, MARYLAND
TRAINING AREA: CHILD MENTAL HEALTH SERVICES AND SERVICE SYSTEM RESEARCH
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This application is for a training grant in Child Mental Health Services and Service System Research. The training program is located in the Department of Mental Hygiene in the School of Public Health of the Johns Hopkins University, and supported by core and associated faculty in the Departments of Mental Hygiene, Health Policy and Management, and Psychiatry. Support for predoctoral students and postdoctoral fellows is requested. The program for predoctoral students involves years of carefully structured course work in the departments of Mental Hygiene and Health Policy and Management in the School of Public Health, and Psychiatry in the School of Medicine followed by examinations, and completing a thesis. The program for postdoctoral fellows involves two years of research with strong mentorship by faculty. The intellectual environment is rich and there are many opportunities for research collaborations. Core faculty are leaders in the field and collaborate on a variety of projects. Trainees have access to new and rich data sets from projects such as the UNOCCAP study, the East Baltimore Mental Health Partnership, and the National Comorbidity Survey. Training opportunities in the Department and School have expanded significantly since the last reviewed submission, and will continue to expand due to new research projects, new complementary training programs, planned expansion of department faculty, and new emphasis on teaching within the School of Public Health. As a result, the training program can take advantage of economies of scale to recruit more intensively and selectively, to teach more courses, and to offer better amenities for trainees, especially postdoctoral fellows. This training program is and continues to be a central component of the Department of Mental Hygiene and the School of Public Health.

GRANT NUMBER: 5 T32 MH18268-14
PROJECT DIRECTOR: LECKMAN, JAMES F, MD
ORGANIZATION: YALE UNIVERSITY
NEW HAVEN, CONNECTICUT
TRAINING AREA: TRAINING PROGRAM IN CHILDHOOD NEUROPSYCHIATRIC DISORDERS
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This is an application that requests support for an innovative institutional training program aimed at preparing physicians and other scientists for careers in basic and clinical investigation of childhood neuropsychiatric disorders. The long-term objective of the program is to increase the number and quality of investigators entering this field. Major features include: 1) Preceptor- directed research training that brings together established investigators in child psychiatry, pediatrics, psychology, developmental neurosciences, genetics, and epidemiology with an outstanding group of postdoctoral fellows from a broad range of clinical and scientific backgrounds; 2) A core curriculum that focuses on the skills necessary to achieve the status of an independent investigator including: formal training in research design and biostatistics; mastery of the knowledge base concerning childhood-onset neuropsychiatric disorders, the protection of human subjects, and the need for safeguards to ensure the integrity of the research enterprise; and the acquisition of the skills needed to prepare and critique original articles and research grant applications. The successful matching of individual faculty preceptors with postdoctoral fellows lies at the heart of this research training program. Over the past 4 years, the number of postdoctoral fellows has been maintained at seven per year. The primary facilities available for use by the trainees are clinical services, laboratories, and research support services affiliated with the Child Study Center. In addition, fellows have access to an array of other facilities in the Medical School and University including two NIH-funded Clinical Research Centers and two Program Project grants.

GRANT NUMBER: 2 T32 MH17140-14
PROJECT DIRECTOR: LEUCHTER, ANDREW F, MD
ORGANIZATION: UNIVERSITY OF CALIFORNIA, LOS ANGELES
LOS ANGELES, CALIFORNIA
TRAINING AREA: RESEARCH TRAINING: PSYCHOBIOLOGICAL SCIENCES
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This is the second revision of a competing continuation application for a training program which had been in continuous operation for twelve years at UCLA. As revised, this program now will train 7 postdoctoral (M.D., M.D./Ph.D., Ph.D., D.N.Sc., or D.O.) and 2 predoctoral fellows. The program is designed to develop independent researchers in psychiatry, psychology, and related disciplines by providing: 1) state-of-the-art research training in the laboratories of experienced researchers in psychiatry, psychobiology, neurobiology, and related fields; and 2) formal didactics which complement the hands-on research experience, emphasizing skills in research methodology and critical thinking, as well as topics relevant to the individual project. Trainees spend approximately 90 percent of their time in research, while broadening and deepening their knowledge by participating in two core seminars and taking selected other classes. Each trainee's curriculum is individually designed to meet their needs. In response to the Committee's critique, the Program has undergone several changes: 1) the program has selected a new Director (Dr. Leuchter), an experienced research mentor with ten years of uninterrupted Federal funding; 2) several preceptors without active funding or ongoing research have been removed from the faculty; 3) recruitment of underrepresented minority trainees has been enhanced through a stronger linkage with a predominantly African-American medical school, as well as by enlisting other University resources; 4) a predoctoral training component has been added which will be used to enhance diversity through recruitment of

underrepresented ethnic minority candidates. The University is providing financial support for this predoctoral training program; 5) new training milestones have been established, including requirements to produce grant applications and first-authored peer-reviewed publications, and 6) training faculty and didactics in genetics have been expanded.

GRANT NUMBER: 1 T32 MH20006-01
PROJECT DIRECTOR: LEVENSON, ROBERT W, PHD
ORGANIZATION: UNIVERSITY OF CALIFORNIA, BERKELEY
BERKELEY, CALIFORNIA
TRAINING AREA: PREDOCTORAL TRAINING CONSORTIUM IN AFFECTIVE SCIENCE
(PREDOCTORAL)

DESCRIPTION (Applicant's abstract): Affective science (the study of emotions, models, affect-based pathology and other emotion-related phenomena) has expanded dramatically in recent years. Its impact has been felt throughout psychology, biology, and psychiatry. With this growth has come the inevitable specialization along with its attendant benefits and costs. Among the benefits are increasingly mature theories and a veritable explosion of methodological advances and empirically-derived knowledge concerning aspects of affect ranging from molecular to molar levels. Among its costs is that it is no longer feasible to be trained to be an expert in all aspects of emotion research, which has led to an increasing isolation among areas of specialization. We propose to augment the specialized training predoctoral students receive in their chosen fields with broad exposure to other traditions within affective science. We hope to foster an appreciation and understanding of the theories, methods, and data of other areas of affective science, thus laying the groundwork for better communication among subspecialties, more interdisciplinary collaborations, and a more incremental affective science in which work in a given specialization also takes into account advances in other areas. In this application for five years of support, we propose to select four students per year from psychology and the health sciences programs at four Bay Area universities (the Berkeley, Davis, and San Francisco campuses of the University of California and Stanford University) to participate in a three-year training sequence leading up to the conduct of the dissertation research. Training will take place in a yearlong seminar at Berkeley, and at specialized workshops and in an annual workshop. Close mentoring and monitoring of trainee progress will be maintained throughout. Training students in affective science has significant social benefits because research on emotion and other affective phenomena has important applications to diverse problems including: (1) physical and mental health and disease; (b) the evaluation of treatment efficacy; (c) attachment, loyalty and commitment to others; (d) facilitation and impairment of problem-solving and thinking; (e) drug abuse and other forms of addiction; (f) marital discord, marital satisfaction and divorce; and (g) child abuse and other forms of violent behavior.

GRANT NUMBER: 5 T32 MH15722-20
PROJECT DIRECTOR: LEVINE, FELICE J, PHD
ORGANIZATION: AMERICAN SOCIOLOGICAL ASSOCIATION
WASHINGTON, DISTRICT OF COLUMBIA
TRAINING AREA: GRADUATE FELLOWSHIP PROGRAM FOR ETHNIC MINORITIES
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The American Sociological Association (ASA) seeks support for its Minority Research Fellowship Program (MRFP). The program goals are to support the training of mental health researchers in sociology and to ensure that minority investigators continue to be recruited into and assume prominent positions in the field of mental health. The specific aims are: 1) to provide support for the training of predoctoral students in sociology over 5-years in mental health issues and research; 2) to help ensure the fellows' completion of the Ph.D.; and 3) to increase their career placement opportunities. The design is a collaborative program development model, forming a partnership among students, ASA-MRFP, research institutions, faculty, and NIMH. This collaborative relationship will provide: financial support, directed research training, professional networks, mentoring,

and continuous evaluation. The program plan reflects strategies to identify, recruit, select, place, mentor, monitor, and evaluate the fellows and the MRFP at all levels, using quantitative and qualitative methods.

GRANT NUMBER: 5 T32 MH19929-05
PROJECT DIRECTOR: LEVITAN, IRWIN B, PHD
ORGANIZATION: BRANDEIS UNIVERSITY
WALTHAM, MASSACHUSETTS
TRAINING AREA: NEUROSCIENCE: FROM CHANNELS TO BEHAVIOR
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The goal of the Neuroscience Training Program at Brandeis University is to train predoctoral students in neuroscience in the context of the newly instituted Neuroscience Ph.D. Program in the Center for Complex Systems. Trainees will be drawn from among the large number of predoctoral students carrying out neuroscience research at Brandeis. Requirements of the program include courses in neuroscience and related subjects, qualifying exams, participation in journal clubs and seminar series, and thesis research in the laboratory of one of the participating faculty. The three major tracks of the training program are Molecular and Cellular Neurobiology and Biophysics, Computational Neuroscience, and Behavioral Neuroscience. The training faculty include 16 members of the Biochemistry, Biology, Chemistry, Physics, and Psychology Departments, all of who are also members of the Center for Complex Systems. Their research interests include structure, function, and modulations of ion channels; biophysics and molecular biology of phototransduction; molecular motors and axonal transport; molecular, genetic, biophysical, and behavioral analyses of learning and memory; neurogenetics of circadian and other rhythmic behaviors; nervous system development; modulation of neural networks; computational modeling of neurons and neural networks; motor patterns and motor control; human visual perception; human speech processing; and human cognitive aging. Accordingly, the trainees will be exposed to a broad range of problems and approaches in modern neuroscience.

GRANT NUMBER: 2 T32 MH19901-06
PROJECT DIRECTOR: LIANG, KUNG-YEE, PHD
ORGANIZATION: JOHNS HOPKINS UNIVERSITY
BALTIMORE, MARYLAND
TRAINING AREA: BIOSTATISTICS MENTAL HEALTH/ PSYCHIATRY TRAINING PROGRAM
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The Department of Biostatistics at Johns Hopkins University requests continued funding for a training program for Biostatistics in Mental Health and Psychiatry. The training program is situated in the Department of Biostatistics, and supported by program and affiliated faculty in the Departments of Biostatistics, Mental Hygiene and Psychiatry and Behavioral Science. The basic aims are two-fold: (1) to produce students with Ph.D.s in biostatistics who have strong interest and training in the application of statistics to mental health and psychiatry and (2) to provide training in biostatistics for post doctoral fellows (psychiatrists, psychologists, or individuals with Ph.D.s in mathematics or mathematical statistics) with interests in mental health to strengthen their quantitative capabilities. Both of these aims are designed to provide the fields of mental health and psychiatry with biostatisticians having an appreciation for and understanding of the public health and scientific issues in mental health and psychiatry. Support for five predoctoral students and two postdoctoral fellows is requested. The program for predoctoral students comprises two years of core course work in the Departments of Biostatistics, Epidemiology and Mental Hygiene followed by examinations and completion of a thesis within 4 to 5 years of matriculation. The program for postdoctoral fellows is for two years, including one year of course work in biostatistics and two years of research mentored by program and affiliated faculty. All trainees are required to participate in ongoing research projects conducted by faculty from the Department of Mental Hygiene and Psychiatry. Program and

affiliated faculty are established leaders in the field and collaborate together in a variety of projects. In addition, trainees have access to many rich data sets including the ECA followup, UNO-CAP, Prevention Center and the Maryland Epidemiologic Sample of schizophrenia, for biostatistics research potential in mental health. Training opportunities for psychiatric/mental health biostatisticians in the department have expanded since the last reviewed submission due to new research projects (e.g., statistical methodology grant on longitudinal data for mental service research), new complementary training programs and planned expansion of departmental faculty. In addition, our program has established an excellent relationship with the Psychiatric Epidemiology Training Program and the Drug Epidemiology Training Program which provide opportunities for collaboration between trainees and long-term involvement in mental health research.

GRANT NUMBER: 5 T32 MH13043-27
PROJECT DIRECTOR: LINK, BRUCE G, PHD
ORGANIZATION: COLUMBIA UNIVERSITY HEALTH SCIENCES
NEW YORK, NEW YORK
TRAINING AREA: RESEARCH TRAINING PROGRAM IN PSYCHIATRIC EPIDEMIOLOGY
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The purpose of this multidisciplinary research training program, which draws both personnel and principles from epidemiology, psychiatry, and the social sciences, is to increase the number of psychiatric epidemiologists who, by virtue of their ability, motivation and training, are capable of making significant contributions to understanding the etiology and course of psychiatric disorders. To achieve these goals, the program provides rigorous training in psychiatric epidemiology through five program components: 1) coursework in general and psychiatric epidemiology; 2) coursework in methodology and statistics; 3) coursework in clinical and diagnostic issues, including the opportunity for patient contact; 4) field placements in ongoing research and the development of fellow initiated research projects; and 5) a weekly faculty-fellow seminar. The trainees in the program are selected from the disciplines of epidemiology, psychiatry, psychology and the social sciences. Predoctoral fellows must be enrolled in a Ph.D. program. Postdoctoral fellows must have a Ph.D. or M.D. We are requesting funds for postdoctoral and predoctoral fellows. The primary training facility is the Division of Epidemiology, School of Public Health, Columbia University in collaboration with the Department of Psychiatry.

GRANT NUMBER: 5 R25 MH57167-05
PROJECT DIRECTOR: LORD, CATHERINE, PHD
ORGANIZATION: UNIVERSITY OF CHICAGO
CHICAGO, ILLINOIS
TRAINING AREA: TRAINING IN DIAGNOSIS OF AUTISM SPECTRUM DISORDERS

DESCRIPTION (Adapted from applicant's abstract): Autism is a disorder that is defined behaviorally, for which no dominant etiology or neurobiological marker has yet been identified. Research has been constrained by the need for reliable and standard diagnostic formulations of autism to ensure comparability of populations. The diagnosis of autism is made complicated by a number of factors. Autism occurs across a range of intellectual levels from severe mental retardation to above average intelligence. Autism is a spectrum disorder. Genetic studies indicate that what is transmitted may be a familial risk for communication, social, and perhaps personality disorders. In addition, because the primary features of autism involved social and communicative deficits, the contexts in which these behaviors are observed are very important. What the examiner does with the child or adult affects the subject's behavior and the examiner's judgments. Assessments standardized both in what aspect of the subject's behavior is scored and what the examiner does (or asks an informant about) are much needed. There is clearly a trade-off between standardized approaches and the need for clinical flexibility in dealing with a population that may range from one extreme to the other in IQ and age. A week-long training workshop provides hands-on training to researchers in the use of two

instruments for the diagnosis of autism: The Autism Diagnostic Interview-Revised (ADI-R; Lord, Rutter & Le Couteur, 1994), a semi-structured investigator-based parent interview, and the Autism Diagnostic Observation Schedule-Generic (ADOS-G), a recently reorganized combination of the ADOS (Lord, Rutter, Good, Mawhood, Heemsbergen & Jordan, 1989), an observational protocol for social and communicative behavior, and the Pre-Linguistic Autism Diagnostic Observation Schedule (PL-ADOS; DiLavore, Lord & Rutter, 1995), an observational protocol comparable to the ADOS but designed for use with young, non-verbal children. The goal of the workshop is for participants to attain familiarity with the instruments and to provide a general knowledge of issues in research diagnoses of autism spectrum disorders.

GRANT NUMBER: 5 T32 MH14654-22
PROJECT DIRECTOR: LUCKI, IRWIN, PHD
ORGANIZATION: UNIVERSITY OF PENNSYLVANIA
PHILADELPHIA, PENNSYLVANIA
TRAINING AREA: TRAINING PROGRAM IN NEUROPSYCHOPHARMACOLOGY
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This is an Institutional Training Program in Neuropsychopharmacology. It supports postdoctoral and predoctoral fellows yearly. Postdoctoral fellows in the program will be either: 1) students with doctoral degrees in pharmacology, psychology, psychobiology or a related discipline, or 2) physicians who have completed at least two years of specialist training in psychiatry, or in selected instances, other specialty areas (e.g., pediatrics, neurology). Predoctoral fellows will be graduates of a four-year program in biology, chemistry, psychology or a related discipline; upon successful completion of the program, they will receive a doctoral degree in pharmacology. A multidisciplinary program has been developed involving faculty from four departments in the School of Medicine as well as faculty from the School of Veterinary Medicine. The faculty members of the program have a history of collaboration in both teaching and research projects. The aim of the program is not only to train scientists who will be able to carry out productive research in their individual fields but also to work effectively at the "preclinical - clinical" interface. This objective is addressed by having the postdoctoral fellows attend specific courses, by arranging for clinical exposure for all non-physicians and by developing interactions between preclinical and clinical investigators. The didactic portion of the program comprises about 15 percent of a postdoctoral fellow's time; most of their time is spent doing research in the facilities of one or more of the 28 faculty members of the training program. The approaches and expertise of the faculty are broad and diverse and enable us to provide training at the molecular, cellular, neuroanatomical, animal behavioral and/or clinical level. The predoctoral fellows take a series of courses designed to provide them with background in the anatomical, biochemical and physiological bases of pharmacology, with an emphasis on neuropsychopharmacology. Specific courses developed to meet these goals include neurochemistry/ neuropharmacology, behavioral neuropharmacology and neuropsychopharmacology. Although a standard curriculum has been devised, the program is structured so that it can be modified to fit the particular needs and career plans of each individual student. At the end of the second year of training, the predoctoral students prepare a written proposal in the format of an NIMH grant application and defend it in an oral examination. Once they pass this comprehensive examination, they begin their thesis research.

GRANT NUMBER: 5 T32 MH19102-10
PROJECT DIRECTOR: MACWHINNEY, BRIAN J, PHD
ORGANIZATION: CARNEGIE-MELLON UNIVERSITY
PHILADELPHIA, PENNSYLVANIA
TRAINING AREA: BASIC PROCESSES & VARIATION IN COGNITION
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The purpose of this predoctoral and postdoctoral program is to train the next generation of cognitive psychologists. The major task confronting this next generation will be the application of models derived from basic cognitive psychology to the study of normal and abnormal variations in cognition. Variation in cognition, both normal and abnormal, can be best analyzed in the context of well-specified models. Such models take a cognitive approach to traditional psychometric questions by seeking to provide mechanistic accounts for variations in particular cognitive abilities and in the transition mechanisms that enable the individual to go from one cognitive state to another. It is the premise of this application that a thorough understanding of basic cognitive models provides a tool for understanding normal variation and for testing the models' implications for cognitive pathologies. By training young scientists in basic cognitive models and in methodologies that extend these models to the study of individual differences, cognitive psychology can build powerful links to theoretical and applied issues in related mental health disciplines. In the previous 5 years, the training program produced 15 predoctoral and 8 postdoctoral trainees. For the next 5 years, the program plans to extend and deepen this record by including yet a broader range of crucial methodological and conceptual tools in training on both the predoctoral and postdoctoral levels.

GRANT NUMBER: 5 T32 MH14275-23
PROJECT DIRECTOR: MADRAS, BERTHA K, PHD
ORGANIZATION: HARVARD MEDICAL SCHOOL
SOUTHBOROUGH, MASSACHUSETTS
TRAINING AREA: RESEARCH TRAINING - BIOLOGICAL SCIENCES
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This program utilizes local research and teaching strengths to train postdoctoral M.D. and Ph.D. candidates in the biological sciences in relation to mental health. Experience over the last three decades has demonstrated that experts in all relevant branches of biological sciences are available for the supervision of trainees. The central focus of the training grant is to provide opportunities to conduct research in laboratories which have integrative programs related to the development and variation of behavior, psycho- and neuropharmacology, neurochemistry, and molecular biology - particularly as these disciplines relate to mental health and mental disorders. The principle objectives of the postdoctoral training program are to train candidates to attain full professional competence in a particular field of activity related to mental health research and to prepare the trainee for a career of independent research. Most training will take place in the biological research laboratories in the Department of Psychiatry. Trainees will spend the majority of their time in active research training in laboratories participating in the program. They also will participate in seminars that will afford trainees the opportunity to present an account of their activities to peers and staff.

GRANT NUMBER: 5 T32 MH18882-12
PROJECT DIRECTOR: MARTINEZ, JOE L, JR, PHD
ORGANIZATION: AMERICAN PSYCHOLOGICAL ASSOCIATION
WASHINGTON, DISTRICT OF COLUMBIA
TRAINING AREA: MINORITY FELLOWSHIP PROGRAM IN NEUROSCIENCE
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The major goal of this program is to increase the numbers of underrepresented neuroscientists, who will undertake research relevant to the aims of NIMH. This proposal seeks support for the Minority Fellowship Program (MFP) in Neuroscience and requests training slots of pre- and postdoctoral trainees. This program is jointly administered by the American Psychological Association and the Association of Neuroscience Departments and Programs and operates with the endorsement of the Society for Neuroscience. The MFP program has been quite successful. At this time, 34 doctoral trainees have completed all requirements for the Ph.D. Based on the completion rate of 64% for those entering graduate school before 1989, it is estimated that 70 trainees will earn their doctorates. Extending this program for an additional five years and selecting additional trainees will greatly increase the total estimated number of produced doctorates. The postdoctoral component of the program, although smaller in absolute numbers, is having an impact as well. During the last five years 8 postdoctoral trainees participated in the program and this number is expected to increase. The success rate for postdoctoral trainees, during the last 5 year period, as measured by their transition to either a more traditional postdoctoral funding mechanism or the attainment of an assistant professor appointment, is 100%. Also requested is support for a month long Summer Program in Neuroscience, Ethics, and Survival (SPINES) held each summer at the Marine Biological Laboratory (MBL). It is felt that this one component of the program more than any other (except graduate training itself) contributes to the success of the MFP program. Students leave the MBL with a new appreciation for neuroscience, a cohort of peers that will influence their careers, training in the responsible conduct of research, exposure to successful underrepresented role models, knowledge of grant mechanism and opportunities available in an institution like the MBL, and an increased motivation to complete graduate or postdoctoral training.

GRANT NUMBER: 5 R25 MH55929-04
PROJECT DIRECTOR: MARTINEZ, JOE L, JR., PHD
ORGANIZATION: AMERICAN PSYCHOLOGICAL ASSOCIATION
WASHINGTON, DIST OF COL
TRAINING AREA: TRAINING IN PROFESSIONAL DEVELOPMENT FOR NEUROSCIENTISTS
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): Over the past several years the investigators involved in the application provided a one-month enrichment experience to small groups of underrepresented minority graduate students in neuroscience, including many women, at the Marine Biological Laboratory in Woods Hole, MA. The workshops included an opportunity to attend the initial month of lectures in one of the NIH-funded courses in neuroscience; small group research seminars led by workshop faculty, visiting speakers, and members of the MBL community; discussions on issues of specific relevance to minorities and women; and explicit training in such academic survival skills as writing, oral communication, teaching, obtaining funding, seeking and retaining employment, and responsible conduct in science. This proposal seeks to (1) significantly increase the number of trainees that can participate in this series, (2) improve the quality of training program through the addition of faculty, improvement of the curriculum, and purchase of a small amount of equipment, and (3) disseminate this training more broadly.

GRANT NUMBER: 5 T32 MH18935-08
PROJECT DIRECTOR: MAURO, ROBERT, PHD
ORGANIZATION: UNIVERSITY OF OREGON
EUGENE, OREGON
TRAINING AREA: EMOTION RESEARCH TRAINING GRANT
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This application proposes a Emotion Research Training program at the University of Oregon. This program provides integrative research training in the diverse approaches and methodologies utilized in research on emotions. The underlying philosophy of the training program is that an understanding of emotion, in both its biological and social contexts, is essential for understanding both normal and pathological functioning. Because emotion is not one of the traditional subdivisions of behavioral science, there is need for systematic training in both the substance and method of emotion research. The training program is organized around the major themes of "emotion and information processing" and "emotion and social interaction." For trainees, the key features of the research program are: (1) a 2-year association with one laboratory for in-depth training; (2) short rotations through two other laboratories for ensuring breadth of training; (3) formal courses in Emotion Theory & Research, Psychophysiology, Psychophysiology of the Brain, and Psychopathology; (4) various workshops; and (5) a biweekly research meeting that has been ongoing since 1985. Support is sought for predoctoral and postdoctoral positions. Predoctoral trainees are to be selected (typically at the beginning of their second year) from graduate students in all programs in the Department of Psychology. Interest in emotion research is a factor in the department-wide graduate admissions process. Postdoctoral trainees will be selected after national advertising of the positions. Ten professors in the University of Oregon Psychology Department have a primary interest in some aspect of emotion research. The training facilities are essentially composed of these professors' laboratories. These laboratories have facilities for independent student research as well as research associated with faculty projects. We are requesting funds to expand the training capacities of these laboratories. The department maintains a clinic, which serves a variety of clients, a large subject pool of college-age students, an infant/parent subject pool, electronic and computer support personnel, a microcomputer laboratory for student use, and a video-editing facility with state-of-the-art equipment. Nationally renowned campus research institutes in Cognitive & Decision Sciences and Neuroscience provide auxiliary contributions to the training program.

GRANT NUMBER: 5 T34 MH19101-09
PROJECT DIRECTOR: MAY, PHILIP A, PHD
ORGANIZATION: UNIVERSITY OF NEW MEXICO, ALBUQUERQUE
ALBUQUERQUE, NEW MEXICO
TRAINING AREA: NEW MEXICO ACCESS TO RESEARCH CAREERS IN MENTAL HEALTH
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This NIMH/COR program will be directed by Philip A. May, Ph.D. with faculty support from Judith A. Arroyo, Ph.D. As an honors undergraduate program to train qualified Hispanics, American Indians, and African and Asian Americans, we propose to focus on research training in mental health and comorbidity. Trainees participate in the program for 2 years. We admit new trainees each year. UNM also provides matching funds for certain students. Students qualify when they are rising minority Juniors, have maintained a 3.0+ Grade Point Average (GPA), have applied expressing commitment to pursue a research career in mental health, and pass a personal interview. The UNM student population is 31.1% minority on the main campus, and our 3 branch campuses are more heavily minority. UNM has one of the largest Hispanic enrollments of any major US university and the largest number of American Indian students. UNM, the program director, COR Faculty, faculty mentors, and the home department (Sociology) have a strong 15-year commitment to research training for minorities. COR students are able to pursue quality research and substantive training leading to a BA or BS in one of 4 majors: Biology, Pharmacy, Psychology, or Sociology. Additionally, they receive intensive training and "hands-on" experience in research through mentorships, summer internships, colloquia, and seminars. UNM has 28 highly qualified faculty who

have served as mentors for this program in the past 4 years, and students can also pursue research experience at other universities. All COR mentors are active in research and publishing; most hold funded research grants. Students are personally encouraged, advised, and taught by multi-ethnic faculty, so that they successfully integrate professional norms, knowledge, and techniques. The first 3 1/2 years have been successful: 22 NIMH students; current GPA of 3.61; 85% graduated; 54% of graduates are in graduate school (Fall '93 GPA = 3.75); 38% are applying; six major referred scientific publications have been co-authored by students; over 20 NIMH COR conference presentations were made in 3 conferences; and a dozen presentations have been made at professional society meetings. Improvements have also been made in the program to correct encountered problems.

GRANT NUMBER: 5 T32 MH19292-09
PROJECT DIRECTOR: MAZADE, NOEL A, PHD
ORGANIZATION: NATIONAL ASSOCIATION OF STATE MENTAL HEALTH PROGRAM DIRECTORS
ALEXANDRIA, VIRGINIA
TRAINING AREA: PUBLIC-ACADEMIC RESEARCH FELLOWSHIP TRAINING PROGRAM (POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This request is for the NASMHPD Research Institute's Public-Academic Fellowship Program in Mental Health Services Research. The Program was initiated in 1989 and has continued through 1995. The program is unique in that it provides training in mental health services research in sites composed of a state mental health agency and an affiliated university. Fellows spend 50 percent of their time in the public agency conducting applied research and devote the remainder of their time to advanced studies at the university to learn sophisticated research design and methodology. A continuation application was submitted in 1994 and the IRG recommended several alterations including delineation of each fellow's academic studies, an indication of how the Program would be managed, and evidence of scholarly output. This reapplication is intended to respond to these concerns.

GRANT NUMBER: 1 T32 MH20018-01
PROJECT DIRECTOR: MCDANIEL, J S, MD
ORGANIZATION: EMORY UNIVERSITY
ATLANTA, GEORGIA
TRAINING AREA: HIV/AIDS CLINICAL RESEARCH TRAINING PROGRAM (POSTDOCTORAL)

DESCRIPTION (Applicant's Abstract): The complex biomedical, psychological, neuropsychiatric, psychosocial, and sociocultural challenges associated with the HIV/AIDS epidemic are such that there continues to be a critical need for specialists in HIV/AIDS clinical research. This application proposes the development of a training program to provide comprehensive postdoctoral clinical research training in the HIV/AIDS mental health and behavioral science arena for psychiatrists and clinical psychologists. Through the creation of a training infrastructure consisting of an interdisciplinary collaborative faculty, the program would: (1) provide broad HIV/AIDS clinical research training through didactic seminars and involvement in research projects, and (2) offer specialized training along one of three pathways: applied mental health research, behavioral interventions research, or research linking basic science investigation to clinical areas. The program will be located in the Emory University Department of Psychiatry and Behavioral Sciences with key training linkages throughout the Emory University School of Medicine, Rollins School of Public Health, Yerkes Regional Primate Research Center, Centers for Disease Control and Prevention, and Georgia State University. The diversity of the program faculty and resources permit innovative research pursuits with clinically, ethnically, and culturally diverse populations of HIV-seropositive and HIV-affected individuals and groups. The overall goal of the proposed clinical research training program is to train clinical researchers who could

then meaningfully contribute to the future scientific agenda for HIV/AIDS mental health and behavioral science research.

GRANT NUMBER: 5 T32 MH15125-20
PROJECT DIRECTOR: MC EWEN, BRUCE S, PHD
ORGANIZATION: ROCKEFELLER UNIVERSITY
NEW YORK, NEW YORK
TRAINING AREA: BIOLOGICAL & PHYSIOLOGICAL DETERMINANTS OF BEHAVIOR
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The purpose of this training program is to provide interdisciplinary postdoctoral training and research experience on the basic biological and psychological determinants of a variety of behavioral processes. A central focus of this program is understanding the ways in which the environment interacts with the genetic constitution and modifies the structure and function of the brain through chemical messengers such as hormones, neurotransmitters and drugs. Behavioral processes include seasonal and cyclical behaviors related to reproduction and defense of territory (including and especially bird song); motivational states and mechanisms of food intake, salt appetite and reproduction; fundamental processes underlying learning and memory; and abnormal states such as obesity, depressive illness, and Alzheimer's disease. Six laboratories at the Rockefeller University are involved in this training program, together with faculty members within these laboratories. The rationale for the program is that the Training Program Director (TPD) needs to provide a common ground for their postdoctoral trainees, so that they can partake of the richness offered by the TPD's six laboratories and by the University as a whole. In an institution like Rockefeller, where there are no departments and where the administrative unit is the laboratory run by a senior professor or independent junior faculty member, such a training program is particularly important in providing personal contacts and technical and scientific information outside the laboratory in which the trainee is located. The TPD intends to increase the contacts between laboratories by using the 6 lab heads as a steering committee for the selection of trainees and assessment of progress; in addition, the TPD will establish a visiting scholar program. The training program is in its 16th year.

GRANT NUMBER: 5 T32 MH17146-15
PROJECT DIRECTOR: MC FALL, RICHARD M, PHD
ORGANIZATION: INDIANA UNIVERSITY, BLOOMINGTON
BLOOMINGTON, INDIANA
TRAINING AREA: RESEARCH TRAINING IN CLINICAL SCIENCE
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The faculty of this training program is committed to basic research on clinically relevant problems. Problems are approached from a variety of perspectives: psychobiology, psychopharmacology, behavioral genetics, developmental psychology, information processing, and stress, coping, social support, and well-being. Some of the substantive areas studied include neurochemical and hormonal mediators; cognitive and perceptual processes implicated in disorders such as violent behavior, addiction, and affective disorders; competence, coping, and social factors in the development of behavior problems in children and adults; dynamical systems and the regulatory processes that underlie behavioral change and stability; and the relations between genetic variability and deviant behavior. The program seeks funding for annual predoctoral and postdoctoral traineeships. The trainees, while taught broadly in psychology, will receive intensive research training in specific problem areas, such as the ones described above. The training faculty consists of eight core clinical faculty members, plus ten affiliated faculty members from animal behavior, cognitive and developmental psychology, neuroscience, and social psychology who are committed to bridging the gap between their basic research and clinically relevant research problems. Training experiences are tailored to the needs and interests of individual trainees. The program encourages collaboration. The

training program prepares graduates for independent research careers as clinical scientists.

GRANT NUMBER: 5 T32 MH15330-21
PROJECT DIRECTOR: MC HUGH, PAUL R, MD
ORGANIZATION: JOHNS HOPKINS UNIVERSITY
BALTIMORE, MARYLAND
TRAINING AREA: INTERDISCIPLINARY TRAINING IN PSYCHIATRY & NEUROSCIENCE
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The purpose of the program is to provide interdisciplinary training to postdoctoral fellows in neuroscientific research in areas relevant to the biological basis of mental disorders. The Department of Psychiatry and Behavioral Sciences and the Department of Neuroscience jointly sponsor the training program at The Johns Hopkins University School of Medicine. The core faculty all have primary or secondary appointments in either of these two departments and have an established record of collaborative interaction. The research interests of the core faculty represent the major subdisciplines of the neurosciences, including physiological psychology, neurochemistry, neurophysiology, neuroanatomy, psychopharmacology, neuropsychiatry, and biological psychiatry. The primary vehicle for training is supervised research in the laboratory of one of the core faculty members, with an organized didactic teaching program in relevant aspects of clinical psychiatry and neuroscience. The training program provides a unique opportunity for Ph.D.'s and M.D.'s to obtain training in basic neuroscientific research at the postdoctoral level, presented in a context of an interdisciplinary approach to research and oriented toward the appreciation of the relatedness of basic neurosciences and clinical psychiatry. The goal of the program is to train future academic researchers to undertake a career in the investigation of the basic biological processes involved in mental disorders.

GRANT NUMBER: 5 T32 MH16242-19
PROJECT DIRECTOR: MECHANIC, DAVID, PHD
ORGANIZATION: RUTGERS, THE STATE UNIVERSITY, NEW BRUNSWICK
NEW BRUNSWICK, NEW JERSEY
TRAINING AREA: MENTAL HEALTH SERVICES AND SYSTEMS RESEARCH TRAINING
PROGRAM
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The proposed program will train postdoctoral students from sociology, psychology, history, economics, urban planning, social work, and psychiatry in mental health services research. Participants include the faculty of several disciplines at Rutgers University as well as selected faculty from the Robert Wood Johnson Medical School and from several clinical facilities. Trainees will be actively integrated into the research structures of Rutgers' Institute for Health, Health Care Policy, and Aging Research and its Center for the Organization and Financing of Care for the Severely Mentally Ill. The particular areas of training focus on system integration, mental health and managed care, community outcomes, organization and financing of care, and mental health policy. Trainees are recruited from among those who have completed the highest degree in their respective disciplines. They stem from a number of disciplines including sociology, psychology, history, economics, urban planning, social work, and psychiatry. All trainees participate in regular mental health seminars and are immersed in an atmosphere of ongoing mental health research. Most will pursue research projects as participants in large, collaborative research endeavors while some will pursue independent research projects. We propose to have postdoctoral trainees during the next phase of our training program. The training program is based at Rutgers University with involvement of other educational, research, and clinical facilities. Course offerings are drawn from the curricula at Rutgers and its joint programs with the Robert Wood Johnson Medical School. The training grant is incorporated into the Institute for Health, Health Care Policy, and Aging Research, established by Rutgers University

and directed by David Mechanic. It is an integral component of the Center for Research on the Organization and Financing of Care for the Severely Mentally Ill.

GRANT NUMBER: 5 T32 MH19952-03
PROJECT DIRECTOR: MILNER, JOEL, PHD
ORGANIZATION: NORTHERN ILLINOIS UNIVERSITY
DE KALB, ILLINOIS
TRAINING AREA: FAMILY VIOLENCE AND SEXUAL ASSAULT RESEARCH TRAINING
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The overarching goal of the proposed training program is to provide systematic predoctoral research training in the areas of family violence and sexual assault with an emphasis on the training of women and minority students. A specific program goal will be to train 75 percent women and 50 percent minority researchers. Each year, five-year fellowships will be awarded to predoctoral students, so that in the fifth year of the training program several doctoral students will be receiving support from the training grant. One specific aim of the program will be to teach students a variety of methodologies and multivariate approaches that can be used to investigate variables from different ecological levels (i.e., individual, family, and society). An emphasis will be placed on the development of the theory driven, programmatic research approaches that can be used to investigate both basic and applied questions. The training program will also focus on the increasingly complex practical, ethical, and legal difficulties associated with conducting family violence and sexual assault research. While the research areas of the core faculty (as indicated by their training and published research) represent a broad array of interests in terms of problems and factors studied, the proposed training program will be located in the Department of Psychology and Family Violence Research Program (FVRP), and trainees will receive a doctoral degree in clinical psychology. Departmental facilities, FVRP resources, and a large training clinic will support research training. The proposed research training activities are conceptualized as representing three overlapping domains: background knowledge, research skills, and practice-related skills. Based on these three general domains, thirteen specific training objectives are proposed. Procedures that will be used to evaluate the successful completion of each training objective (as well as how students will evaluate the proposed program) are specified.

GRANT NUMBER: 2 T32 MH19117-09
PROJECT DIRECTOR: MORRISSEY, JOSEPH P, PHD
ORGANIZATION: UNIVERSITY OF NORTH CAROLINA, CHAPEL HILL
CHAPEL HILL, NORTH CAROLINA
TRAINING AREA: RESEARCH TRAINING IN MENTAL HEALTH SERVICES & SYSTEMS
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This proposal requests support for an institutional training program for postdoctoral training in mental health services and systems research sponsored by the Cecil G. Sheps Center for Health Services Research (Sheps Center) of the University of North Carolina at Chapel Hill (UNC-CH) and the Department of Psychiatry at Duke University Medical Center (DUMC). This interdisciplinary training program for social scientists and clinicians has been highly successful in its developmental period. A total of thirteen fellows have been involved in the program; the participating faculty have more than doubled from 11 to 24 persons; the program's externally-funded research grants portfolio has expanded tremendously from about \$2.2 million to over \$6 million in annual direct costs including a newly awarded five year (1993-98) NIMH services research center (P50-MH51410) for persons with severe mental disorder; and Public-Academic Liaison (PAL) relationships have been nurtured and expanded to state and local mental health agencies in North Carolina, South Carolina, Virginia, Ohio, as well as in several other states. Given the success of this program and its growth (especially in the child mental health area), this application requests additional postdoctoral training slots.

GRANT NUMBER: 5 T32 MH19893-03
PROJECT DIRECTOR: MORTIMER, JEYLAN T, PHD
ORGANIZATION: UNIVERSITY OF MINNESOTA
MINNEAPOLIS, MINNESOTA
TRAINING AREA: MENTAL HEALTH AND ADJUSTMENT IN THE EARLY LIFE COURSE
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This application requests support to establish a research training program on the psychosocial determinants of mental health and adjustment in the early life course, including childhood, adolescence, and the transition to adulthood. This interdisciplinary program emphasizes: (a) a life course perspective, stressing the changing social contexts of development and the connections between them; (b) the early life trajectories of mental health and behavioral adaptation and transitions between life stages; (c) longitudinal assessment and application of dynamic modeling techniques to the determinants of variation in these trajectories; and (d) special populations and social policy. The training experience consists of a series of core seminars, extending throughout the training period, other formal course work, and a research apprenticeship. Eight University of Minnesota investigators, representing Sociology (College of Liberal Arts), the Child Development Institute (College of Education), and the Program in Health Services Research, Policy and Administration (School of Public Health), constitute the core faculty. With full access to the facilities of those units, pre- and postdoctoral trainees will be involved in longitudinal studies focused on the following topics: community context and children's mental health; a preschool enrichment demonstration research project; changes in parent-child relations during the transition from childhood to adolescence; family violence and conflict resolution, and the development of antisocial behavior; adolescent work experience and mental health; and the effects of the transition to adulthood (including educational, occupational, and family markers) on mental health and adjustment in early adulthood. The competencies to be developed include solid grounding in one discipline (Sociology, child Psychology, or Public health), an interdisciplinary perspective, methodological expertise, and sensitivity to social policy issues. Guidance, with respect to the responsible conduct of research, will be provided through formal coursework as well as informal training activities. Trainees will have normally completed two years of graduate studies prior to being admitted to the program and will thus have a solid grounding in either sociology, child psychology or public health. During the program they will continue to complete the requirements of their own program while focusing on: (1) acquiring an interdisciplinary perspective on mental health and adjustment in the early life course; (2) gaining confidence in methods; and (3) developing sensitivity to social policy issues. The program is designed to develop these competencies through taking courses in the core discipline, participating in the core seminar, attending public policy seminars and through research apprenticeships involving hands on experience and data analyses. The focus of each quarter's core seminar will be determined by the collective judgment of core faculty but will include at some point topics such as "measurement of mental health and social context through the early life course"; "conceptualizing, measuring, and analyzing trajectories of development in the early life course"; "psychosocial determinants of adolescent problem behavior with emphasis on the family, the peer group, the school, and the work place"; and, "problems with longitudinal data collection." These weekly core seminars are a central integrative mechanism of the program and all of the core faculty and students will participate.

GRANT NUMBER: 5 T32 MH19833-05
PROJECT DIRECTOR: MRAZEK, DAVID A, PHD
ORGANIZATION: CHILDREN'S NATIONAL MEDICAL CENTER
WASHINGTON, DISTRICT OF COLUMBIA
TRAINING AREA: RESEARCH TRAINING IN EARLY DEVELOPMENTAL
PSYCHOPATHOLOGY
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The proposed training program seeks to prepare postdoctoral fellows for independent research careers in the area of early developmental psychopathology. A special emphasis is on training postdoctoral students in research methodologies designed to elucidate the relative effects of genetic and environmental risk factors. The program described will draw upon the complementary strengths of two distinct but tightly integrated clinical research centers, the Children's National Medical Center and the Family Research Center at George Washington University, to provide a multidisciplinary faculty, an intensive didactic curriculum, and a broad range of supervised clinical research experiences. The major foci of the training program will include: 1) the investigation of gene-environment interactions; 2) the identification of at-risk samples of children in the first eight years of life; and 3) the encouragement of sensitivity and specificity in research on environmental influences associated with minority status and urban poverty. The resources and supporting environment for the training program are considerable, including designated space in a newly constructed Developmental Psychopathology Laboratory, equipment allocation and necessary support staff. The key components of the educational plan include both a core research curriculum and three ongoing seminar series. The training model is characterized by a commitment to the importance of providing an intensive mentoring experience. The program is located at a world-class, tertiary care pediatric hospital that offers opportunities for collaboration with existing clinical investigators in other medical subspecialties, including Neurology, Genetics, Pulmonary Medicine, Allergy and Immunology, Radiology, Hematology/Oncology, Trauma/Intensive Care, Endocrinology, and Community Pediatrics.

GRANT NUMBER: 5 T32 MH14623-20
PROJECT DIRECTOR: MULLEN, EDWARD J, DSW
ORGANIZATION: COLUMBIA UNIVERSITY, NEW YORK
NEW YORK, NEW YORK
TRAINING AREA: RESEARCH TRAINING IN SOCIAL WORK & MENTAL HEALTH
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This application seeks support for a predoctoral and postdoctoral training program in social work mental health services research. Building upon seventeen years of experience educating mental health research scientists supported by the NIMH HRSA program, we propose a continuation of this program focusing on issues of mental health clinical services and service systems research. Within this broad designation, three specific areas have been selected for study. They are mental health issues related to: (1) assessment; (2) special populations including racial and ethnic minorities, children, and those affected by AIDS/HIV; and (3) social work and social policy analysis in mental health services research. These three have been selected because of their current importance to the field, the fact that they span clinical services and service system concerns, and the presence of courses and senior faculty with ongoing research in each area. The goal is to educate social work researchers with academic preparation in both clinical services and service systems, knowledge of sophisticated methods of empirical research, and supervised research field experience.

GRANT NUMBER: 5 T32 MH19990-02
PROJECT DIRECTOR: MURPHY, GREGORY L, PHD
ORGANIZATION: UNIVERSITY OF ILLINOIS, URBANA-CHAMPAIGN
CHAMPAIGN, ILLINOIS
TRAINING AREA: LANGUAGE PROCESSING - A TRAINING PROGRAM
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The training program in language processing seeks to train scientists who can advance our understanding of the cognitive basis of human communication. For predoctoral trainees, the program offers a coherent set of formal courses, advanced-topic research seminars, and research training in experimental psycholinguistics and computational modeling. For postdoctoral trainees, the program offers opportunities for broadening knowledge and skills in preparation for careers in linguistics or cognitive neuroscience. For students at all levels, the program offers broad and balanced training as a scaffolding for the development of outstanding researchers. The research of the program faculty spans language acquisition, language production, language comprehension, and reading. This breadth fosters abilities in conceptual analysis and theoretical development across the full range of core components of human language use. The methodological expertise of the program faculty encompasses eye-movement monitoring, computational modeling, event-related-potential recording, and the basic techniques of cognitive research. This range gives trainees the opportunity to attain high levels of skill in designing, implementing, and interpreting experiments using state-of-the-art methods for probing the workings of language processing. Funds are requested to support both predoctoral and postdoctoral trainees. The predoctoral training program demands four years beyond the bachelor's degree. It fulfills the basic requirements for the doctoral degree within the cognitive division of the Department of Psychology, using division options to create doctoral-program plans with a major emphasis on the experimental study of language processing and minor emphases on linguistics, cognitive neuroscience, and reading. The postdoctoral program offers training in language processing as a supplement for doctoral training in linguistics or cognitive neuroscience. The proposed training will take place within a strong institutional matrix formed by the Cognitive Division of the Department of Psychology and the Cognitive Science Group at the Beckman Institute for Advanced Science and Technology. Both settings offer exceptional physical and intellectual resources fueled by a rich tradition of graduate training in psycholinguistics.

GRANT NUMBER: 5 R25 MH19537-08
PROJECT DIRECTOR: NADEL, LYNN, PHD
ORGANIZATION: UNIVERSITY OF ARIZONA
TUCSON, ARIZONA
TRAINING AREA: COMPLEX SYSTEMS SUMMER SCHOOL

DESCRIPTION (Adapted from applicant's abstract): The purpose of the present training grant is to support the holding of the Complex Systems Summer School in Santa Fe, New Mexico. The goal of the Summer School is to provide graduate students, postdoctoral fellows and active research scientists With an introduction to the study of "complex" behavior in mathematical, physical, and living systems as part of an interdisciplinary effort to promote the understanding of complex systems. At each School, a set of lectures is provided by leading researchers in diverse fields unified by their use of complex systems analysis. Students are chosen for their interest in interdisciplinary research; they all must have an adequate background in mathematics to ensure that they benefit from the materials presented at the School. The present training grant was awarded on the assumption that students in the neurosciences would particularly benefit from exposure to a diverse set of scientists using dynamic systems methods in approaching their specific research interests. In order to carry out this mandate we have to make certain that a significant proportion of the students admitted to the School have an interest in neuroscience, biology, and neural networks research. The School itself continues to evolve in response to the experiences of the previous years. We have recently instituted a new to help students benefit from the entire range of topics--a set of tutorials at the start of the School to provide students with a basic "toolkit" in areas such as evolution, ecology, computation, dynamic systems, disordered systems, information theory, chaos, neural nets and neuroscience. A lecture volume results from each School, adding to the

series of "Complex Systems Summer School Lectures." These volumes now include student contributions, reflecting the student seminar series that has emerged over the years. These ``contributions exemplify the interactions between students in different fields that emerge each summer. Our long-term goals for the Summer School are to provide a framework within which neurobiologists, and others, can learn from each other, and benefit from methods and techniques pioneered in diverse fields of study of complexity.

GRANT NUMBER: 5 T32 MH19936-04
PROJECT DIRECTOR: NEFF, NORTON H, PHD
ORGANIZATION: OHIO STATE UNIVERSITY
COLUMBUS, OHIO
TRAINING AREA: RESEARCH TRAINING IN NEUROPHARMACOLOGY
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): Neuropharmacology employs knowledge derived from neuroscience research to determine how psychotherapeutic and psychotomimetic drugs and neurotoxins act in the CNS and the neurochemical substrates that mediate their activity. This training program combines the talents of neuroscientists and trainee-recruiting resources from three ongoing programs (The Department of Pharmacology, The College of Medicine, The Division of Pharmacology, The College of Pharmacy, and The Neuroscience Program – an intercollegiate program). The training program will provide the next generation of scientists with the intellectual and technical skills needed to continue with the important task of unmasking the mechanism of action of psychotherapeutic drugs, developing new therapeutic agents, and understanding the cause of mental illness. Predoctoral trainees will be eligible for the program after becoming a candidate for a Ph.D. i.e., after completing the General Examination. It is anticipated that trainees will complete their thesis requirement in two years. Postdoctoral trainees are anticipated to complete training in two years. The faculty are a cohesive group of funded neuroscientists with contemporary and traditional neuropharmacological research experiences including molecular biotechnology, neurochemistry, cell culture, patch-clamp recording and image analysis capabilities. The training program takes advantage of all of the research, teaching and recruiting resources of three major programs at The Ohio State University.

GRANT NUMBER: 5 T32 MH19733-05
PROJECT DIRECTOR: NEWHOUSE, JOSEPH P, PHD
ORGANIZATION: HARVARD UNIVERSITY
BOSTON, MASSACHUSETTS
PROJECT TITLE: HEALTH POLICY TRAINING PROGRAM
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This training grant seeks support for doctoral and postdoctoral training in mental health policy. Funds will be used to support doctoral and postdoctoral training, including coursework, research practitioners, exposure to clinical setting, and dissertations. Funds will support specialized reading courses and a seminar series in mental health policy. Fellows will enroll in Harvard University's Ph.D. program in Health Policy. The program seeks to train individuals for research careers, primarily at universities but also at research institutes and government. The program is a collaboration among four faculties: Arts and Sciences, the Medical School, Public Health, and the Kennedy School; and is administered through the University's Division of Health Policy Research and Education. Fellows will concentrate in one of five disciplines: economics, decisions sciences, statistics and evaluative science, political or organizational analysis. Not only will these funds lead to the training of a cadre of specialists in mental health policy, but also they will institutionalize mental health as a field within the Harvard Ph.D. program.

GRANT NUMBER: 5 T32 MH14641-23
PROJECT DIRECTOR: NEWMANN, JOY P. PHD
ORGANIZATION: UNIVERSITY OF WISCONSIN, MADISON
MADISON, WISCONSIN
TRAINING AREA: MENTAL HEALTH SERVICE SYSTEMS RESEARCH TRAINING
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The goal of this program is to provide mental health services research training for an interdisciplinary group of postdoctoral trainees. The program will focus on the functioning and effectiveness of mental health service delivery systems, with a special emphasis on programs providing care for chronically mentally ill persons in the community. The program faculty will be interdisciplinary, encompassing the fields of sociology, psychology, psychiatry, nursing, and health service administration. An interdisciplinary group of students will be recruited, representing these and related fields. The central training experience for postdoctoral fellows will be involvement in ongoing research with a senior researcher. They also will participate in seminars and fieldwork experiences in mental health delivery organizations, supervised by program faculty. A short internship experience in a governmental office will be required of all postdoctoral fellows. Postdoctoral trainees will be recruited through informal contacts and formal published notices of openings. The program and postdoctoral fellows' offices will be in the Department of Psychiatry, a major clinical department within the University of Wisconsin Medical School. Computer, consultation, and other research support services are available at the University of Wisconsin.

GRANT NUMBER: 5 T32 MH19942-02
PROJECT DIRECTOR: NEWPORT, ELISSA L, PHD
ORGANIZATION: UNIVERSITY OF ROCHESTER
ROCHESTER, NEW YORK
PROJECT TITLE: RESEARCH TRAINING IN LEARNING, DEVELOPMENT, AND BIOLOGY
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Applicant's Abstract): This application requests support for a predoctoral and postdoctoral training program in learning, development, and biology within the Department of Brain and Cognitive Sciences at the University of Rochester. The training program includes faculty members from the Department of Brain and Cognitive Sciences, all of whom study learning and development of complex behaviors in humans and animals. This program reflects their recognition of the potential for a synthetic approach to the study of learning. Current approaches to computational modeling, neurophysiological, and behavioral investigations have begun to share enough formal similarities to be mutually informative; at the same time, these approaches bring distinctive perspectives to the problem of learning and development so that their integration can lead to new insights. The proposed program therefore aims to train students in the study of learning and developmental plasticity from the joint perspectives of behavioral, computational, and neurophysiological approaches. Surrounding the faculty group at the University are additional programs in each of the relevant domains and systems. Support is requested for predoctoral and postdoctoral students; when combined with other sources of support, this will permit a larger group of predoctoral students in this program as well as predoctoral and postdoctoral students in other related programs. Trainees will enter through the Department of Brain and Cognitive Sciences and will be trained in core courses; advanced seminars in learning, development & biology, language & cognition, perception, and basic neuroscience; research methods courses; and research experience in behavioral studies, computational modeling, and neuroscience studies. This breadth of training is possible because the program faculty members have degrees in five different disciplines and conduct research on overlapping problems from a variety of different methodological approaches. They currently advise 10 predoctoral students with a focus on learning and developmental plasticity, whom exemplify the high quality of students the faculty is able to attract.

GRANT NUMBER: 5 T32 MH19996-02
PROJECT DIRECTOR: NOLEN-HOEKSEMA, SUSAN K, PHD
ORGANIZATION: UNIVERSITY OF MICHIGAN AT ANN ARBOR
ANN ARBOR, MICHIGAN
TRAINING AREA: TRAINING PROGRAM IN GENDER AND MENTAL HEALTH
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): Gender differences abound in most mental health problems. Growth in understanding of these differences has, however, been slow due to the lack of interdisciplinary research and training in this area. A Training Program in Gender and Mental Health will accomplish three goals: producing new scholars to conduct basic research on gender and mental health; encouraging an interdisciplinary approach to this research; training excellent teachers in this field. By bringing together twenty primary faculty in seven fields (Psychology, Women's Studies, and the many research laboratories and resources at the University of Michigan, we will provide integrated, interdisciplinary pre- and postdoctoral training in research on gender and mental health. Each year we will admit postdoctoral students to a two-year program and predoctoral students to four-year training program. The Training Program will be directed by Psychology professor, Dr. Susan Nolen-Hoeksema, and administered by the interdisciplinary Institute for Research on Women and Gender and a Steering Committee composed of faculty from the participating fields.

GRANT NUMBER: 5 T32 MH14584-23
PROJECT DIRECTOR: NUECHTERLEIN, KEITH H, PHD
ORGANIZATION: UNIVERSITY OF CALIFORNIA, LOS ANGELES
LOS ANGELES, CALIFORNIA
TRAINING AREA: PSYCHOLOGICAL RESEARCH ON SCHIZOPHRENIC CONDITIONS
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This training program is designed to train investigators in the basic skills necessary to conduct clinical research with persons with schizophrenia and other psychotic disorders. The program emphasizes research training in three areas: psychosocial factors associated with the course and outcome of schizophrenia; neuropsychological approaches to the study of schizophrenia; and treatment research. The latter covers psychosocial rehabilitation strategies, clinical psychopharmacological trends, and combined psychosocial and pharmacological treatments. The program has four components: (1) skill training in the systematic assessment of patient symptomatology and social functioning; (2) participation in an ongoing research seminar; (3) development of an individual research program by trainees; and (4) academic coursework. There are two related training programs, one for predoctoral trainees who are students admitted to the Ph.D. program in psychology at UCLA and a second for postdoctoral trainees. The latter program is available to persons who have received a Ph.D. in psychology, or an M.D. followed by a psychiatric residency. Generally, half of the postdoctoral trainees are Ph.D.'s and half M.D.'s. Each trainee is assigned to a primary and secondary mentor who supervises his/her training activities. The program is designed to last for 2 years.

GRANT NUMBER: 1 T32 MH20010-01
PROJECT DIRECTOR: NURIUS, PAULA S, PHD
ORGANIZATION: UNIVERSITY OF WASHINGTON
SEATTLE, WASHINGTON
TRAINING AREA: MENTAL HEALTH PREVENTION RESEARCH TRAINING PROGRAM
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): There is a critical need for prevention research in mental health, but there are not enough prevention researchers to meet the need. The Institute of Medicine estimates that there is an immediate need for 500 new well-trained prevention researchers. Currently, there are five NIMH-funded prevention research centers nationally, but only two of these are linked to training of prevention researchers. Thus, there exists a large gap between the need for prevention researchers and the expected supply. In response to this need, the University of Washington School of Social Work proposes to establish a 5-year rigorous predoctoral training program in research focused on prevention of mental health problems and disorders that will support 10 - 12 predoctoral trainees each year. The University of Washington is an ideal site for such training because of its strong research tradition, its excellent resources, and a faculty that includes outstanding leadership in the field of prevention science. The School of Social Work is uniquely qualified to provide the training. It is a leader in its field, has a strong research culture, a highly productive faculty that includes nationally known prevention researchers, is the site of one of the small number of NIMH-funded prevention research centers, and has a nationally prominent Ph.D. program. The training program includes a strong multidisciplinary group of core and contributing faculty from six schools and departments at the University of Washington. Training will require completion of all currently existing requirements for the social welfare doctoral degree; in addition, trainees will complete a) a 3-quarter integrative seminar on prevention of mental disorders; b) a 3-credit graduate course on prevention science, c) a graduate level course on psychopathology, d) additional course work in advanced statistics, e) a minimum of three quarters of research internship on a prevention research project in which they will receive close mentoring by a senior investigator, f) specialized, individually tailored mentoring and advising to focus on those individualized aspects of the existing doctoral program on prevention of mental health problems and disorders, and g) become integrated members of the Social Work Prevention Research Center where they will have access to Center resources that will complement their training. Trainees will be recruited from a national pool of applicants and must have strong academic records, a demonstrated interest in prevention of mental health disorder, and strong potential for research.

GRANT NUMBER: 5 T32 MH19185-09
PROJECT DIRECTOR: OLDSTONE, MICHAEL B, MD
ORGANIZATION: THE SCRIPPS RESEARCH INSTITUTE
SAN DIEGO, CALIFORNIA
TRAINING AREA: NERVOUS-IMMUNE SYSTEM INTERACTIONS: CNS EFFECTS OF HIV
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The aim of this Training Grant proposal is to train fellows to work in the general area of nervous system-immune system interactions. The focus is on CNS effects of human retrovirus infections. The purpose will be to provide a center of excellence where the training necessary to diagnose and understand the pathogenesis of AIDS dementia and other virus-related disorders of brain function can be provided in order to approach a rational strategy of therapy and prevention. Our intent is to turn out competent, independent investigators to staff medical schools, universities and research institutes who as scientists will have acquired sufficient concepts, skills, and knowledge to understand and work at the interface of the central nervous and immune systems and will then be able to address important biomedical problems in this area. Further they will serve as a cadre to train the future wave of young scientists. The training experience is designed to integrate and complement structured lectures and courses with a program of supervised independent research training under a faculty mentor. The structured program consists of faculty lectures, postdoctoral seminars on "critical" issues in neurobiology and symposia where "new strategies and concepts" in nervous system diseases will be organized. The symposia will focus

on: 1) retrovirus infections of the central nervous system, and 2) interactions of nervous and immune systems. In addition, graduate level courses for postdoctoral fellows in neurosciences, biology, pathology, or structural chemistry are available at UCSD. An individualized training program provides fellows an opportunity to do full-time research under the guidance of an established, successful research scientist. The mentor will be able to address questions daily as they arrive as well as provide close supervision. The high caliber of junior and senior faculty and associated fellows in the research institute enables each candidate to achieve the potential he or she possesses. The research training program has sufficient required presentations by the trainee to allow ongoing constructive criticism and assistance of his or her ongoing research training. The core of our training program will be directed towards effective melding of the strategies, concepts and experimental analysis between the viral pathogenesis of CNS disorders and more traditional concepts of transmitter-related drug strategies underway in neuropsychopharmacology of behavioral and addictive disorders. To emphasize this newly forged interdisciplinary area, we propose to enrich the training opportunities by convening two international research meetings (years 2 and 4) that will bring to our campus leaders in the cutting edge research questions on CNS-retrovirus-immune system interactions. These meetings will allow our trainees to meet and their work to be recognized by world leaders in research, and will allow the faculty to share their research training endeavors with other AIDS- supported efforts.

GRANT NUMBER:	5 T32 MH19963-04
PROJECT DIRECTOR:	O'NEILL, WILLIAM E, PHD
ORGANIZATION:	UNIVERSITY OF ROCHESTER ROCHESTER, NEW YORK
TRAINING AREA:	TRAINING IN NEUROSCIENCE (PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This program is a multidisciplinary predoctoral training program within the existing Graduate Program in Neuroscience at the University of Rochester. The Steering Committee for the Graduate Program is of the opinion that the recent trend toward reductionism in neuroscientific research, while enormously fruitful in the short-run, must ultimately be redirected back toward the traditional broad-based view of neuronal function and its relationship to behavior. This program is specially designed to train selected students to carry out mental health-related neuroscientific research with a spectrum of techniques from molecular and cellular biology to behavior. Twenty-eight preceptors with excellent well-funded research programs and a strong record of training success were selected for this program. The preceptors are divided for pedagogical reasons into two Research Clusters: "Molecular and Cellular Signaling" and "Integrative Systems". Additional resource faculty from a total of about 65 neuroscience laboratories at the University are available to the program as well. During their training, students in this program will choose a mentor from each of these two clusters for laboratory rotation experiences. These mentors will team up with the trainee to devise a coordinated approach to a single research problem. Monthly research meetings will be held for the trainees and preceptors to present results and encourage free exchange of ideas and information. All predoctoral trainees will matriculate in the Interdepartmental Graduate Program in Neuroscience. The academic curriculum includes required courses in cellular neurobiology, neuropharmacology, integrative systems neuroscience, and behavioral neuroscience. Students are exposed to related fields including biochemistry, molecular biology, immunology, statistics and computer science. Additional enrichment of the training experience is provided by a journal club, a seminar series for outside speakers, a "Visiting Scholar" program that brings in one or two particularly noteworthy scholars for a series of lectures/workshops each year, and locally organized symposia on Alzheimer's disease and visual science.

GRANT NUMBER: 5 T32 NS07431-02
PROJECT DIRECTOR: OXFORD, GERRY S, PHD
ORGANIZATION: UNIVERSITY OF NORTH CAROLINA
CHAPEL HILL, NORTH CAROLINA
TRAINING AREA: RESEARCH TRAINING IN THE NEUROSCIENCES
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): Support is requested from a broad, comprehensive, and fundamental interdisciplinary predoctoral training program in the neurosciences at the University of North Carolina at Chapel Hill. The proposed training program is intended to consolidate 2 existing training grants from the NIMH and NINDS. The training will be administered by the interdepartmental curriculum in neurobiology, which is in its fourth decade of existence. Training will involve 53 faculty members of the curriculum representing research laboratories in 14 departments or programs. The research facilities are well-equipped and funded for a wide variety of anatomical, molecular, genetic, chemical, electrophysiological, behavioral, and biophysical investigations. During the past year, the curriculum has become closely integrated with the new UNC Neuroscience Center providing expanded opportunities for training through the development of new research laboratories and the recruitment of new faculty. The formal training program is already in place and constitutes a series of required reorganized curriculum, laboratory apprenticeship research with individual faculty mentors, focused dissertation research, research seminars, techniques seminars, clinical correlation experiences, journal clubs, and discussions groups on topics of career development and research integrity. In addition, an annual Carolina Neuroscience Symposium will expose trainees to current thought on specialized topics presented by distinguished scientists from outside UNC. The proposed training program will take advantage of several areas of particular strength in neurobiology research at UNC including: 1) recovery and regeneration following spinal neuron injury; 2) molecular correlations of specific sensory neuronal function; 3) response of the nervous system to toxic challenge; 4) structure, function, and regulation of neurotransmitter receptors and transporters; 5) mechanisms of signal transduction and ion channel function; 6) cell and molecular biology of synaptic transmission and synaptogenesis; 7) neuroendocrine and neuroimmune interactions; 8) functional imaging of nervous system activity *in vitro*, *in vivo*, and *in situ*; and 9) distribution and regulation of neuropeptides active in various regions of the central nervous system. Support is requested for predoctoral trainees. Qualified minority candidates will be aggressively recruited.

GRANT NUMBER: 5 T32 MH19917-05
PROJECT DIRECTOR: PERETZ, BERTRAM, PHD
ORGANIZATION: UNIVERSITY OF KENTUCKY
LEXINGTON, KENTUCKY
TRAINING AREA: BEHAVIORAL ECOLOGY AND COMPARATIVE NEUROBIOLOGY
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): A fundamental goal of mental health research is understanding the biological basis of behavior. While neuroscience has made great strides in defining the cellular and molecular mechanisms of brain function, development and maintenance, less attention has been focused on understanding how natural selection shapes neural systems. A more complete understanding of behavior emerges when its neural substrates are investigated in a context that includes the evolutionary history and behavioral ecology of organisms. This is a research training program that promotes the objectives of mental health research by integrating the experimental rationales of cellular and molecular neuroscience with behavioral and evolutionary ecology to produce broadly trained behavioral researchers. Our program incorporates 12 faculty with expertise and facilities for research in neurobiological developmental, ecological and evolutionary studies of behavior at four levels of biological organization: neurons, neural networks, organisms, and populations. The framework for integrative research training is a core curriculum vitae basic courses in behavioral ecology and comparative neurobiology, and an advanced course that emphasizes the interface between these areas. An integral part of this course are sessions in which trainees interact with and learn techniques from visiting scientists. Interdisciplinary experimental skills are developed through

laboratory rotations and specialized elective courses. Research training will encompass experimental methods ranging from field studies of behavior to studies of behaviorally relevant neural molecules. Trainees will focus on how relevant environmental stimuli, how these factors impinge on behavior and its neural substrates, and how responses in neurons and networks relate to behavioral adaptation. The program will provide intensive cross-disciplinary training for pre- and postdoctoral trainees; particular attention is given to recruitment of underrepresented minority students, building upon existing institutional and departmental initiatives in this area. The unique feature of this research training program is our long-term goal of training independent investigators who are equipped with multidisciplinary research skills that are critical for future progress in understanding the biological basis of behavior.

GRANT NUMBER: 5 T32 MH18269-13
PROJECT DIRECTOR: PILKONIS, PAUL A, PHD
ORGANIZATION: UNIVERSITY OF PITTSBURGH AT PITTSBURGH
PITTSBURGH, PENNSYLVANIA
TRAINING AREA: CLINICAL RESEARCH TRAINING FOR PSYCHOLOGISTS
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The goal is to prepare psychologists for careers as clinical researchers. Clinical psychologists, while well trained in psychological theory, research methodology, and quantitative skills, require additional preparation to enable them to work effectively with the more seriously ill and chronic patients seen in tertiary care centers as well as to conduct clinically relevant research in a multidisciplinary setting. The applicant proposes an integrated three-year training sequence that would combine the traditional predoctoral internship with two years of postdoctoral training. Support is being requested only for the last two (postdoctoral, research) years. By recruiting clinical psychology graduate students with demonstrated scholarly interests and accomplishments at the predoctoral internship level, the program will be better able to identify and prepare talented young psychologists for academic careers. The first specific aim is to provide trainees with intensive clinical experiences during the internship in the management of a broad spectrum of patients seen in a multidisciplinary university hospital setting. The second aim is to provide a predoctoral and postdoctoral curriculum that will enhance conceptual and practical clinical research skills. Finally, the program will provide an intensive research mentorship, with established clinical investigators, at the postdoctoral level. The overall goal is to promote the career development of clinical psychologists who are capable of pursuing independent research initiatives and opportunities for individual research funding. The training site serves a heterogeneous urban population, and the development of sensitivity to racial, ethnic, and social differences is stressed throughout the program.

GRANT NUMBER: 5 T32 MH19126-10
PROJECT DIRECTOR: PINCUS, HAROLD A, MD
ORGANIZATION: AMERICAN PSYCHIATRIC ASSOCIATION
WASHINGTON, DISTRICT OF COLUMBIA
TRAINING AREA: PROGRAM FOR MINORITY RESEARCH TRAINING IN PSYCHIATRY
(PMRTP)
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The central objective of the Program for Minority Research Training in Psychiatry (PMRTP) is to increase the number of underrepresented minorities entering and remaining in the field of psychiatric research. The program takes a developmental approach to reach, recruit, and train the next generation of minority researchers at the medical school, residency, and fellowship levels, using a variety of mechanisms for recruitment, preparation, and retention and for offering both short- and long-term training in major centers of psychiatric research. Specifically, the PMRTP seeks to: 1) increase the number of trained ethnic minority researchers in the field of psychiatry; 2) broaden the limited network of trained minorities and other researchers who

can serve as advisors, mentors, and resources to identify, recruit, and assist young minority trainees; 3) develop an information data base of current psychiatric research activities and research training opportunities available to minority medical students, psychiatric residents, and potential fellows; and 4) establish a national network of training sites in major research-intensive departments of psychiatry through which potential minority research trainees may be matched to research training opportunities in their particular areas of research interest. Program staff work with minority physician and medical student organizations and with the psychiatric education, research training, and research communities (a Minority Research Consortium), as well as with relevant individuals, to identify potential minority research fellows and to offer them a chance to compete for both long- and short-term research training opportunities. Potential applicants may receive encouragement and advice through a network of advisors and may be matched to a relevant training program based on their interests and specific research training opportunities. Applicants are selected competitively through a process designed and implemented by the program's Advisory Committee. Award recipients at the medical student, resident, and fellowship levels are provided the opportunity, through long- and short-term training funds which may be supplemented at the discretion of the selected institution, to engage in training and the conduct of basic, clinical, and services research at specific research-intensive departments of psychiatry throughout the country. A broad array of enrichment activities and resources are made available to provide information about psychiatric research training and the opportunity for both formal and informal network building with colleagues in the field and with senior researchers. Fellowship graduates also have the opportunity to engage in mentorship training as a way of helping assure an adequate supply of next generation minority researcher- mentors.

GRANT NUMBER: 1 T32 MH20007-01
PROJECT DIRECTOR: PINKER, STEVEN, PHD
ORGANIZATION: MASSACHUSETTS INSTITUTE OF TECHNOLOGY
CAMBRIDGE, MASSACHUSETTS
TRAINING AREA: VISUAL COGNITION
(PREDOCTORAL)

DESCRIPTION (Applicant's Abstract): The Center of Cognitive Neuroscience in the Department of Brain and Cognitive Sciences of MIT proposes to create a research training program in Visual Cognition. The program is based on the beliefs that vision is central to the understanding of the mind, and that it now can only be studied in a way that integrates knowledge and methods from many traditional disciplines (cognitive psychology, psychophysics, neuroscience, neuropsychology, computer vision). This requires new generations of scientists whose training encompasses all these disciplines. MIT is an especially suitable site for such a program because of its long history of accomplishments in vision science (both research and training), the unusual composition of the department (experimental psychology, computation, and neuroscience), and the existence of the Center for Cognitive Neuroscience, which provides the experience and infrastructure for an interdisciplinary training program. The program would provide six predoctoral and two postdoctoral students with core course in cognitive science and neuroscience, foundational courses in vision, visual cognition, and computation, early and extensive research experience, the guidance of two advisors (in two different areas among the three constituting the department), oral and written qualifying exams, research seminars, experience and training in undergraduate teaching, close oversight of progress, repeated oral presentations, and immersion in a peer culture of students and fellows interested in visual cognition.

GRANT NUMBER: 5 T32 MH19957-03
PROJECT DIRECTOR: PINTAR, JOHN E, PHD
ORGANIZATION: UNIVERSITY OF MEDICINE/DENTISTRY NEW JERSEY
ROBERT WOOD JOHNSON MEDICAL SCHOOL
TRAINING AREA: MOLECULAR AND DEVELOPMENT BASIS OF MENTAL ILLNESS
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): A new training program is proposed that is being offered jointly by faculty on the Busch campus of the Robert Wood Johnson Medical School and Rutgers University. The program is designed to train both pre- and postdoctoral students with a specific and strong emphasis on understanding developmental and molecular mechanisms of mental illness. The goal of the predoctoral program is to provide graduate students with basic academic training in sub-fields of neuroscience and to broaden their training in research methodologies relevant to the study of mental illness. All emphasis is placed on understanding developing systems and the regulation and maintenance of functional circuits once they are established. The postdoctoral program provides the trainees with information and techniques that will allow them to establish independent research programs in the area of mental illness. Research areas of specialization include molecular and cell biology, behavior, biophysics, neuroanatomy, neurophysiology, and neuropharmacology. Both predoctoral and postdoctoral programs utilize structured and unstructured components to meet the training goals. The training is integrated across different disciplines of the highly interactive faculty, many of whom have arrived at Robert Wood Johnson Medical School and Rutgers University within the past 5 years. Predoctoral candidates are drawn from two Ph.D. programs, Neurobiology & Physiology, and Molecular Bioscience. The basic curriculum is based on courses offered in these programs by faculty of the Medical School and College of Arts and Sciences, with specific courses relating to the central theme of the training program incorporated into the studies of each trainee. Postdoctoral candidates will have access to all course offerings that are relevant to the research theme of the training program. Both pre- and postdoctoral trainees will have available a variety of other activities and facilities in addition to the primary interaction between trainee and mentor. These include seminars, journal clubs, progress report meetings, and affinity research groups. The progress of the trainees is monitored routinely through these various training components and communicated to the Administrative Committee and Program Director. In the present proposal, support for predoctoral and postdoctoral trainees is requested. The predoctoral trainees must have relevant research training and experience, as well as appropriate future scientific and academic goals.

GRANT NUMBER: 1 T32 MH19993-01
PROJECT DIRECTOR: POWLEY, TERRY L, PHD
ORGANIZATION: PURDUE UNIVERSITY, WEST LAFAYETTE
WEST LAFAYETTE, INDIANA
TRAINING AREA: PURDUE INTEGRATIVE NEUROSCIENCE PROGRAM
(PREDOCTORAL)

DESCRIPTION: (Adapted from applicants description) To consolidate and augment new graduate training program in Integrative Neuroscience, this proposal requests five years of support. This new program at Purdue University was initiated three years ago. It is highly integrative, involving 28 faculty trainers from 10 departments in 5 schools. It provides a solid core of training in the fundamentals of neuroscience as well as more specialized training options, spanning across molecular, cellular, and systems levels, in three broad thematic areas. The three themes, each providing training relevant to programs and initiatives in mental health fields, are 1) Molecular Signaling, 2) Development and Plasticity, and 3) Behavioral and Cognitive Neuroscience. Students work with individualized advisory committees as well as a Graduate Training Committee to assure that they receive strong grounding in fundamentals and principles of integrative neuroscience as well as coherent training in an integrative specialty. The resulting curriculum provides a focus and depth of training often found only in more narrow programs, while also achieving the scope and breadth of the best interdisciplinary programs. Novel features of this program interlink it with the entire national and international neuroscience enterprise. Each semester, in addition to the extensive curriculum

offered by Purdue neuroscience faculty, a special Integrative Neuroscience course staffed by eminent visiting neuroscientists is offered. Stipends for students to travel to premier training sites to obtain skills in specialized techniques are also provided. The overall result is an exceptional new program. It is integrative both in its content and in the complementarity it provides between Purdue's strengths and the best neuroscience resources available nationally and internationally. Students trained in the interdisciplinary Purdue Integrative Neuroscience program will make substantial contributions to mental health research and its applications in the next century.

GRANT NUMBER: 5 T32 MH19960-04
PROJECT DIRECTOR: PROCTOR, ENOLA K, PHD
ORGANIZATION: WASHINGTON UNIVERSITY
ST. LOUIS, MISSOURI
TRAINING AREA: GWB MENTAL HEALTH SERVICE RESEARCH TRAINING
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The George Warren Brown School of Social Work proposes to establish a predoctoral Mental Health Services Research Training Program with the objective of training Ph.D. level researchers who are knowledgeable about the prevalence of mental disorders; the history and trends in public and private service delivery; sources and patterns of funding; and the design, measurement, and analysis issues in studying mental health services and their component treatments. Trainees will benefit from the multidisciplinary resources of the NIMH supported Center for Mental Health Services Research and from the extensive research activity at the University's Department of Psychiatry. The predoctoral training program will require: 1) a mental health services course, three research design courses, three statistics courses, two data management and analysis courses, three social work theory courses, plus a minimum of 15 credits taken outside of social work in such disciplines as psychology, economics, or psychiatry; 2) specialized advising; 3) three semesters of supervised, sequential research practica, affording an opportunity to learn directly from social work and psychiatry faculty across phases of the research process; and 4) mental health seminars and consultation with nationally renowned Senior Scientist Collaborators. The program will also provide "early research recruitment," enabling first year M.S.W. students to explore their interest and aptitude for a mental health services research career. The high level of faculty research provides an excellent environment for predoctoral training. Related to the Center for Mental Health Services Research are Dr. Arlene Stiffman's "Youth Access and Utilization" study, four current and two proposed development projects, and a number of research enhancement activities. Research in the Department of Psychiatry will provide additional training opportunities. Recruitment efforts will be directed toward individuals with the M.S.W. in social work or other behavioral or social sciences. Selection criteria include demonstrated specialized interest in mental health services research and a strong aptitude for research.

GRANT NUMBER: 1 T32 MH19975-01
PROJECT DIRECTOR: PYLYSHYN, ZENON, PHD
ORGANIZATION: RUTGERS, THE STATE UNIVERSITY
PISCATAWAY, NEW JERSEY
TRAINING AREA: VISUAL PERCEPTION AND LANGUAGE
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Applicant's Abstract): This proposal for an Institutional NRSA is being submitted by the Rutgers Center for Cognitive Science (RuCCS) to support a unique interdisciplinary training program in Visual Perception and Language. Central to the structure of the program is the recently established Certificate in Cognitive Science, managed by RuCCS faculty (all of whom have joint appointments with one of the participating academic departments). This Certificate program provides a well-defined structure for recruiting, selecting, training and monitoring students, and for creating a cross-departmental research community of students, postdoctoral fellows, and

faculty. This training program focuses on the twin areas of Visual Perception and Language, but adds to it our special interdisciplinary strength in theory, foundations, and computational modeling. Certificate students must enroll in a doctoral program in one of the participating departments, but they are advised and monitored by the Center faculty as they progress through a sequence of extra-departmental course- and research-requirements. We sketch the research themes that characterize the program's strength and describe the unique tradition of cross-disciplinary collaboration and training that are the hallmark of Rutgers' approach to Cognitive Science. We also document the physical and human resources at Rutgers - New Brunswick, and the strong commitment that the university has made to the Center and to Cognitive Science, which will allow the NRSA training funds to be well used and highly leveraged. The proposal requests funds for three five-year and one three-year predoctoral fellowships. Rutgers University would then more than triple the number of student years of support (to a total of 60) by providing additional University Excellence Fellowships, TA's and RA's to allow a total of 12 students to be supported over a period of 9 years. The proposal also calls for 2 postdoctoral fellowships for the duration of the period of the training grant, to be matched by Rutgers. The training plan provides for an intimate mix of junior and senior predoctoral trainees and postdoctoral fellows to work closely together, as well as a rigorous structure that will mentor and monitor students through their highly interdisciplinary training.

GRANT NUMBER: 5 T32 MH18903-10
PROJECT DIRECTOR: RABIN, BRUCE S, MD, PHD
ORGANIZATION: UNIVERSITY OF PITTSBURGH AT PITTSBURGH
PITTSBURGH, PENNSYLVANIA
TRAINING AREA: TRAINING IN BEHAVIORAL IMMUNOLOGY
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This application is requesting funding for a postdoctoral training program and the addition of a predoctoral training program which will prepare individuals for a career in behavioral immunology. The training program has been successfully established and has brought together faculty from the University of Pittsburgh and Carnegie-Mellon University who share a common interest in behavioral immunology and have demonstrated the ability to collaborate in research and training activities. As will be outlined in our application, we have unique capabilities to train both predoctoral and postdoctoral students. We use a variety of experiences in our training program which include formal courses; the extensive use of tutorials; seminars; and research programs involving humans, non-human primates, and rodents. Ours is an interdisciplinary program in the area of brain, behavior, and immunity where trainees with various backgrounds are brought together and given the opportunity to extensively interact with the faculty and other trainees. Trainees have the opportunity to participate in a primary research program while becoming knowledgeable about other areas of behavioral immunology research. The program provides strengths in both immunology and the behavioral sciences. Upon completion of the training program, the predoctoral trainees will be prepared to enter postdoctoral training programs and the postdoctoral trainees will be prepared to enter positions in academic settings. Adequate laboratory space, office space, secretarial support, computer facilities and libraries are available for the trainees. We are requesting funding for both predoctoral and postdoctoral trainees. The predoctoral program is 3 years in duration and the postdoctoral program is for a period of 2 years.

GRANT NUMBER: 1 T32 MH19983-01
PROJECT DIRECTOR: REDER, LYNNE M, PHD
ORGANIZATION: CARNEGIE-MELLON UNIVERSITY
PITTSBURGH, PENNSYLVANIA
TRAINING AREA: COMPUTATIONAL & BEHAVIORAL APPROACHES TO COGNITION
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Applicant's Abstract): The purpose of the proposed predoctoral and postdoctoral programs is to train the next generation of cognitive psychologist both to develop formal computational models and to test and refine these models, by rigorously comparing the simulation data to carefully collect empirical data. The field is ready to benefit from formal, computational models of cognitive processes. The tools are being developed that enable this formalism, and the end product will not only deepen the empirical and conceptual basis of cognitive psychology, but will also provide stronger links between psychology, neuroscience, and the treatment of problems in mental health. Carnegie Mellon is especially suited to provide this next generation of cognitive scientists with these tools. There is a long tradition at CMU to strive for complete cognitive models to account for a wide range of phenomena using a small common set of theoretical assumptions. The proposed program would be our first focused on training modeling skills. One of the distinctive features of psychological research at CMU is the dual concern for experimental methodology and theoretical models, not just each in isolation. We have promoted the development of both production system (symbolic), connectionist (sub-symbolic), and hybrid models of the human information processing architecture as well as many specific models of performance in particular tasks. In all cases, the researchers have tested and refined their models based on behavioral and physiological data collected here at CMU and elsewhere. Methodologies that have been developed and refined within our department include: the automatic coding of verbal protocols, the analysis of eye fixations while thinking and problem solving, and functional MRI measurements of higher cognitive processes. Some of these models address the data at the grain size of individual responses, with few subject specific parameters. The program's goal is to develop skilled researchers who are both competent and comfortable combining the approaches of behavioral research with development of computationally implemented modes of cognitive performance. Participation in research, both empirical and modeling, is a fundamental component of helping students achieve this goal. Formal courses and seminars will play an important role as well. We will formally instruct and demonstrate the skills of comparing the data derived from a simulation to the human data collected from behavioral research, providing students with the skills to evaluate the quality of the fit and the sensitivity to know when and how to revise one's model based on these comparisons. In addition, we will insure that trainees are conversant in multiple computational approaches and recognize the strengths and weaknesses of each.

GRANT NUMBER: 5 T32 MH14677-22
PROJECT DIRECTOR: REICH, THEODORE, MD
ORGANIZATION: WASHINGTON UNIVERSITY
ST. LOUIS, MISSOURI
TRAINING AREA: RESEARCH TRAINING IN CLINICAL SCIENCES
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This application requests support for an Institutional National Service Award to support postdoctoral training in Psychiatric Genetics, Molecular Genetics and Neurobiology. Major training areas include Family Studies and Nosology; Mathematical and Statistical Genetics; Behavioral and Biometrical Genetics; and Molecular Genetics and Neurobiology. Fellows are expected to train for three years, but in exceptional cases a shorter training period may be offered. They are expected to train in more than one area of expertise and usually have more than one preceptor. An extensive didactic and individualized educational program are included as central features of the training experience. The program is modeled on and obtains facilities and support from a Mental Health Clinical Research Center in Genetic Epidemiology. The fellowship program is greatly strengthened by the participation of many preceptors in national and international genetic initiatives to detect, map and characterize genes for Bipolar Disorder, Schizophrenia, Alzheimer Dementia, Non-Alzheimer Dementia,

Recurrent Unipolar Depression and Alcoholism and related disorders. Large family databases in major psychiatric disorders are also available for genetic epidemiological modeling. In addition, large data sets of general population, twin and twin family data are available for study. The department has approximately 48 Federally funded grants, of which 16 are in psychiatric genetics or molecular neurobiology. Three preceptors with primary appointments outside psychiatry have an additional six federally funded grants which further increase opportunities for the fellows.

GRANT NUMBER: 2 T32 MH19908-06
PROJECT DIRECTOR: REISS, ALLAN L, MD
ORGANIZATION: STANFORD UNIVERSITY
NEW HAVEN, CONNECTICUT
TRAINING AREA: TRAINING FOR CHILD PSYCHIATRY AND CHILD DEVELOPMENT
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This is an application for a competitive renewal of an NIMH institutional training grant in child and adolescent mental disorders at Stanford University. This grant will provide funding for research training to child psychiatry residents and postdoctoral fellows in related disciplines, who plan to enter full-time careers in academic research. The program consists of three tracks, each focusing on a particular domain of academic training and research pertinent to child and adolescent mental disorders. While the training program emphasizes developmental approaches to psychopathology overall, three tracks, (1) Neuroscience and Genetics, (2) basic psychosocial, and (3) Applied/Clinical, permit more specialized experiences for trainees. Each track will be headed by a senior faculty member with expertise in that area. The program also emphasizes a close collaboration between adult and child psychiatry in order to facilitate research into developmental aspects of psychopathology across the life span. The training program consists of the following three tracks: a) Neuroscience and Genetics: headed by Co-PI, Allan L. Reiss, M.D.; b) Basic Psychosocial, headed by Stewart Agras, M.D.; and c) Applied Sciences/Clinical Research, headed by Hans Steiner, M.D. Each faculty member named in this application has agreed to act as the primary mentor for one or more. In addition to mentored research training, didactic training will be provided. Regardless of the research track selected, each trainee will be required to attend a course on biostatistics and research design (preceptor: Helena Kraemer, Ph.D.) a year long weekly seminar on applied issues (preceptor: Hans Steiner, M.D.); and a course in the ethics of scientific conduct, taught at the medical center. In addition, within each track, there will be a core curriculum that will consist of courses more directly relevant to the specific research interests of the individual trainee. The currently existing NIMH child and adolescent mental disorders training grant has clearly helped the Division to attract more research candidates into child psychiatry and thus contribute to the expansion of the child psychiatry researcher pool, still a highly relevant issue in 1997. In our first application we predicted that this grant also would have an enriching and unifying effect at our institution, bringing individuals together with common scientific and training interests who might not otherwise work closely together. This has, indeed, taken place. As can be seen from our list of currently active collaborations and grants, child psychiatrists, adult psychiatrists and faculty from other departments are working together on such diverse issues such as eating disorders, bipolar disorders, pervasive developmental disorders, autism and delinquency.

GRANT NUMBER: 5 T32 MH15442-21
PROJECT DIRECTOR: REITE, MARTIN L, MD
ORGANIZATION: UNIVERSITY OF COLORADO HEALTH SCIENCES CENTER
DENVER, COLORADO
TRAINING AREA: DEVELOPMENT OF MALADAPTIVE BEHAVIOR
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This application is for a training grant that has been in progress for the past 17 years in the Department of Psychiatry at the University of Colorado School of Medicine. They are requesting 5 years of support for postdoctoral trainees, including a position identified specifically for research training for a child psychiatrist. During the past 17 years, they have graduated 53 young scientists from this research training program, 18 of whom are M.D.'s, and 47 of whom are actively involved in research and/or academic careers. Trainee candidates are M.D.'s or Ph.D.'s trained in an area that is relevant to the proposed research program. Most often this will include physicians trained in psychiatry, child psychiatry or pediatrics, and Ph.D.'s trained in psychology, anthropology, molecular biology, electrophysiology, or genetics. Recruitment is national, and special efforts are in place for the recruitment of underrepresented minorities. Their faculty consists of 17 scientists, of whom 4 are recipients of Research Scientist Awards or RSDA awards, 3 of whom are MERIT awardees. A core curriculum includes bi-weekly Developmental Psychobiology Research Group (DPRG) seminars; a bi-weekly hour faculty mini-symposium; an ethics seminar series; biennial DPRG retreats; a mini-retreat; and, for physician trainees, a one year course in statistical methods. An elective curriculum is also available. Research training opportunity in the laboratories of the faculty include training in cognitive, emotional, and perceptual development in normal and high-risk infants and children; biochemical and pharmacological studies of brain maturation; neuropsychological and genetic studies of dyslexia; studies of developmental disability in autism; early affective regulation of chronically ill pediatric patients; molecular biology of schizophrenia; behavioral immunology in humans and animal models; genetic parameters in development disabilities animal models of mental illness; and magnetoencephalographic (MEG), magnetic resonance (MR), and electroencephalographic (EEG) correlates of psychoses. The facilities include those of the University of Colorado Health Sciences Center, National Jewish Center for Immunology and Respiratory Medicine (NJCIRM), and the University of Denver. Trainees have access to patient populations of the Divisions of Child and Adult Psychiatry, UCHSC, and to the various patient populations of affiliated hospitals, including: University Hospital, Denver VA Medical Center, NJCIRM, The Children's Hospital, and Denver General Hospital. Faculty provide access to special clinical populations, including autistic and psychotic children, newborn infant and adolescent populations, children with other psychiatric disorders, research diagnosed psychotic patients, children and family members of schizophrenic subjects, children with genetically determined developmental disabilities, and learning disordered populations. The training program is normally 2 years in duration. Trainees completing this program will be able to assume the role of an independent investigator in one of the multiple areas encompassed by the training program.

GRANT NUMBER: 5 T32 MH18242-13
PROJECT DIRECTOR: REPPUCCI, N DICKON, PHD
ORGANIZATION: UNIVERSITY OF VIRGINIA, CHARLOTTESVILLE
CHARLOTTESVILLE, VIRGINIA
TRAINING AREA: RESEARCH TRAINING IN DEVELOPMENTAL PSYCHOLOGY
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The goal of this program is to provide broad and intensive training in developmental psychology to predoctoral and postdoctoral students. Trainees are given the opportunity to engage in a wide range laboratory and field-based research in order to acquire the repertoire of skills necessary to become competent researchers prepared to deal with the complex problems confronting developmental psychology in the next decade. The program is comprised of an outstanding core of developmental faculty, who is joined by a number of additional faculty members with substantive interests in developmental issues. Faculty members are

engaged in an extraordinarily diverse set of developmental research projects that include biological bases of behavior, perceptual-cognitive and social-emotional development, language development, adolescent decision making, family studies, daycare, and public policy. For the purposes of training, the research activities of the faculty are organized into four core clusters: 1) development of basic processes; 2) high-risk children and families; 3) families in context; and 4) quantitative theory and methods in developmental psychology. Within each cluster, faculty are engaged in a considerable amount of collaborative research, and share various facilities, equipment, and students. The predoctoral program consists of course work in general psychology and statistics, more specialized coursework in developmental psychology, training in a variety of research skills that are applicable to a wide range of developmental issues, and continuous involvement research. Specific requirements are kept to a minimum to allow students to tailor a program of training that is optimally suited to their individual goals and needs. The postdoctoral program is designed to provide students with advanced training and methods of developmental psychology. It is designed to last two years, and students are expected to initiate new research with one or more of the training faculty while participating in this program.

GRANT NUMBER: 5 T32 MH19986-02
PROJECT DIRECTOR: REYNOLDS, CHARLES F, III, MD
ORGANIZATION: UNIVERSITY OF PITTSBURGH AT PITTSBURGH
PITTSBURGH, PENNSYLVANIA
TRAINING AREA: CLINICAL RESEARCH TRAINING IN LATE-LIFE MOOD DISORDERS
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This is an application for a two-year institutional grant (Clinical Research Training in Late-Life Mood Disorders) to establish a postdoctoral training program for postresidency psychiatrists and Ph.D.'s in the behavioral and neuroscience. The goal of this training program is to develop outstanding researchers in late-life mood disorders who can communicate and function effectively at the interface of clinical and basic neuroscience. The training program will be grounded in the Mental Health Clinical Research Center for the Study of Late-Life Mood Disorders (MHCRC/LLMD) at the Western Psychiatric Institute and Clinic of the University of Pittsburgh but will also draw upon the resources of the University's Alzheimer's Disease Research Center in order to enhance the access of fellows to basic biological and neuroscience laboratories. The postdoctoral program has several fundamental training components: 1) structured rotations through MHCRC cores; 2) an apprenticeship with an academically successful mentor; 3) individually prescribed course work and didactic study based upon each fellow's specific needs; 4) development of core skills and knowledge through participation in a weekly seminar on research survival skills; 5) exposure to a broad range of interdisciplinary research through participation in semi-monthly research seminars sponsored by the MHCRC/LLMD (in which faculty and students of all MHCRC/LLMD cores presently regularly); and 6) development of mentoring experience through role modeling to medical students in the summer research elective. The second programmatic objective of the proposed training program is the creation of the Pitt Summer Elective for Medical Student Research in Late-Life Mood Disorders. The goal of the medical student component is to foster interest among medical students (primarily first- and second-year students) in a career in academic geriatric psychiatry. The students will be selected each year for this eight-week experience, from a national pool of applicants, to be organized around apprenticeship to a mentor in one of the MHCRC/LLMD research cores.

GRANT NUMBER: 5 T32 MH16804-18
PROJECT DIRECTOR: REYNOLDS, CHARLES F, III, MD
ORGANIZATION: UNIVERSITY OF PITTSBURGH AT PITTSBURGH
PITTSBURGH, PENNSYLVANIA
TRAINING AREA: CLINICAL RESEARCH TRAINING IN PSYCHIATRY
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This application is for a postdoctoral training program for post-residency psychiatrists and Ph.D.'s in the behavioral sciences. The overarching goal of this training program is to develop outstanding clinical researchers in psychiatry. Now in its 15th year, this program takes advantage of an outstanding training environment at the Department of Psychiatry and Western Psychiatric Institute and Clinic (WPIC), at the University of Pittsburgh School of Medicine. The Department of Psychiatry has a longstanding commitment to clinical research training, and provides fellows with a rich clinical and research infrastructure, including a broad range of patient populations. The Department has a wide range of NIH-funded Clinical Research Centers, and the vast majority of our program faculty are engaged in multidisciplinary research as leading basic and clinical scientists. The program has several fundamental training components. The most important is an apprenticeship with an academically successful mentor from their program faculty, who represent numerous areas of expertise in psychiatry and neuroscience. Fellows work with mentors on ongoing projects and develop new investigations. In conjunction with the mentor, fellows write data-based and review papers for publication in peer-reviewed journals. During the second year of training, fellows develop and submit an NIH career development or research grant proposal to provide the transition to the status of an independent investigator. Another training component is the development of core knowledge in psychobiology research design, statistics, and assessment in adult and geriatric psychopathology. Individually prescribed course work and didactic study are assigned to each trainee based on their specific needs. Trainees also develop core skills and knowledge in grant writing and project management by participating in a weekly fellowship seminar on "Research Survival Skills." Finally, trainees develop core knowledge of ethical issues in research, via specialized seminar and assigned readings. This postdoctoral training program has achieved considerable success since its inception in 1981, and during the current funding period (1991-present). The large majority of fellows who have completed the program have obtained high-quality academic positions and become productive independent researchers in psychiatry. Based on this program's successful past record, recent significant increases in our research training capacity and the number of qualified applicants, this application requests support for postdoctoral trainees in Year 16 with the addition of a stipend a year. The investigator believes that he will continue to be well-positioned to help address the critical shortage of career clinical investigators in psychiatry.

GRANT NUMBER: 1 T34 MH19982-01
PROJECT DIRECTOR: RHODES, WARREN A, PHD MS
ORGANIZATION: MORGAN STATE UNIVERSITY
BALTIMORE, MARYLAND
TRAINING AREA: MINORITY MENTAL HEALTH RESEARCH SCHOLARS PROGRAM
(PREDOCTORAL)

DESCRIPTION (Adapted from Applicant's Abstract): This is a resubmission of a May 1, 1996 application to fund Minority Mental Health Research Scholars Program (MMHRSP) at Morgan State University. The major long-term goal of the MMHRSP is to increase the number of qualified students who enter research careers related to mental health. To this end, highly selected minority honor students in psychology and social work/mental health will participate in a multi-level assessment driven, four-component project that will enhance the student's desire and ability to pursue a mental health-related research career. Students will 1) be immersed in an intensive research curriculum; 2) be provided additional supportive curricular activities enhancing determination/preparedness for research careers related to mental health; 3) participate as summer research interns under the direction of faculty conducting mental health-related research at major universities or research institutions, and 4) participate as research assistants, working on research projects under the direction of a preceptor who is an experienced mental health research faculty member at

Morgan State or at the Johns Hopkins Prevention Research Center. Regular multi-level assessments (at the student, preceptor, and program level) will provide valuable data to determine if the program is doing what it says it will do (process evaluation) and the extent to which the program is meeting its desired goals and objectives (outcome evaluation). Additionally, the assessment will provide valuable information for student retention and program refinements and allow for replication of the MMHRSP model.

GRANT NUMBER: 5 T32 MH15144-20
PROJECT DIRECTOR: RIEDER, RONALD O, PHD
ORGANIZATION: COLUMBIA UNIVERSITY HEALTH SCIENCES
NEW YORK, NEW YORK
TRAINING AREA: RESEARCH TRAINING: AFFECTIVE & RELATED DISORDERS
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This is a research training program designed to train psychiatrists and Ph.D. psychologists for careers in clinical research focused on major mental disorders - affective, anxiety, eating, and memory disorders. The site and resources for training are the extensive research facilities and faculty of the Department of Psychiatry, College of Physicians and Surgeons (P&S) at Columbia University which, in conjunction with its major research affiliate, the New York State Psychiatric Institute (NYSPI), has recently been the largest recipient of federal research support among departments of psychiatry in the United States. A competitive application procedure that includes the development of a research protocol draws applicants from New York and other sections of the country. There are four major components of the program. Each trainee has a preceptor who is an established clinical researcher with a track record of scientific productivity and funding. The fellows join the preceptor's research group and take part in ongoing research projects as well as develop his or her own protocols. In addition to the senior preceptor, the fellow is assigned a statistics tutor, who usually is associated with the research group. There is an immediate emphasis on learning the skills of data analysis, and the oral and written presentation of research results, as well as learning how to develop and execute research protocols. The second major component is the didactic curriculum which includes 1) introductory and advanced courses in statistics; 2) a research design course attended in each year of the fellowship; 3) seminars on ethics in research; and 4) seminars on modern research techniques (e.g., genetic linkage analysis, brain imaging). The third component is a series of seminars focused on research in progress presented by fellows, members of the department, or invited speakers that covers topics in psychobiology and basic neuroscience. The fourth and final component is a basic science emphasis which includes the expectation that the trainee will learn the principles and application of a laboratory technique through collaboration with a laboratory-based researcher at NYSPI or P&S (e.g., analytic psychopharmacology, molecular or statistical genetics, cardiac physiology, brain imaging). The NIMH NRSA training grant currently provides five stipends per year. With the addition of New York State and other departmental funds, seven to eight fellows have been supported per year. Support for additional fellows is being requested.

GRANT NUMBER: 5 T32 MH18870-11
PROJECT DIRECTOR: RIEDER, RONALD O, PHD
ORGANIZATION: COLUMBIA UNIVERSITY HEALTH SCIENCES
NEW YORK, NEW YORK
TRAINING AREA: SCHIZOPHRENIA RESEARCH TRAINING
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The overall purpose of this training program is to increase the number of researchers in the area of schizophrenia who have an ability to apply modern techniques of clinical research and an ability to incorporate recent developments in neuroscience into their investigations. Training in the disciplines of psychopharmacology, neurochemistry, genetics, neuropathology, neuropsychology, neurobiology and epidemiology

will be offered by participating faculty actively engaged in schizophrenia-related research. All mentors have current federally-funded research projects. The training will develop research skills by supervised participation in ongoing research, but the trainees will be expected to construct and execute independent projects as well. Didactic work will focus on research design and statistics; and a weekly schizophrenia research seminar for fellows, faculty, and invited guests will review current schizophrenia research in all areas. Trainees for the project will primarily be psychiatrists who have completed both their medical school training and four years of residency. These trainees will have had considerable experience with the diagnosis and treatment of major psychiatric disorders, including schizophrenia, but are likely to lack specific research skills such as developing testable hypotheses, designing a feasible research study acceptable to institutional review boards, and the collection and analysis of standardized research data. In addition to these psychiatrists, the applicant expects to recruit M.D./Ph.D.'s with a background in basic science research, and Ph.D. psychologists who have completed their doctoral training. Their training will be adapted to suit their backgrounds and interests. Stipends are requested to support fellows, 3 years each. This program will be conducted at the New York State Psychiatric Institute (PI) and the Creedmoor Psychiatric Center (CPC) in Queens, New York, by faculty members of Columbia University at these institutions. With a total of approximately \$47 million annually in federal grants, a research institute with 70 beds (including a 12 bed designated schizophrenia inpatient research unit) funded by New York State at PI, 24 research beds at CPC similarly funded, a Hughes Institute, and 4 MHCRCs, there exists the research personnel and clinical facilities to continue to execute this proposed training program. Schizophrenia is a devastating illness and a major public health problem. It is estimated that 0.8 percent of the population will eventually develop this disorder, and that one quarter of all hospital beds are occupied by such patients. The illness typically diminishes or destroys the patient's capabilities for productive work. In addition to the personal terror, confusion, and misery that it produces, there is a tremendous stress on family members. A significant portion (15-40 percent) of homeless individuals have been found to be schizophrenic, and it is possible that there is a milder form of the illness not included in the above figures, which also causes significant social and occupational disability.

GRANT NUMBER:	5 T32 MH19930-04
PROJECT DIRECTOR:	ROBERTSON, LYNN C, PHD
ORGANIZATION:	UNIVERSITY OF CALIFORNIA, DAVIS DAVIS, CALIFORNIA
TRAINING AREA:	TRAINING PROGRAM IN COGNITIVE NEUROSCIENCE (PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The cognitive neuroscience program at UC, Davis has experienced an abrupt growth phase with the establishment of the Center for Neuroscience, a university supported research and training center for interdisciplinary neurobiology. In addition to the appointment of Dr. Michael Gazzaniga as Director, the University allocated funds for 10 tenured full-time employees and a new building to house the Center. Demand for predoctoral and postdoctoral training in cognitive neuroscience has tripled in the past two years, and faculty with research interests focused directly on cognitive neuroscience issues has doubled. Around the country, the number of job advertisements that include the need for expertise in cognitive neuroscience has grown substantially. To help meet these demands, the program director is requesting support for graduate students and postdoctoral trainees (M.D. and Ph.D.) to add to the current program in human cognitive neuroscience. Each trainee will be based at the Center for Neuroscience where the mass of the training activity occurs. One of the strengths of the program is the interdisciplinary background of its faculty and the interdisciplinary nature of the training. Another strength is the access the program affords to observing a wide range of cognitive deficits associated with neural damage, and neurochemical or neurosurgical alterations in humans. The investigation of neurologically intact and neurologically impaired individuals gives students an appreciation of the breadth of the field and the necessity for integration and converging evidence. The program is organized to select those applicants with the highest potential for professional and scientific success. Given the substantial commitment of UC to the development of neurosciences on the Davis campus, there is every reason to believe that future success and development of the program are insured.

GRANT NUMBER: 5 R25 MH56853-02
PROJECT DIRECTOR: RODRIGUEZ, WANDA, PHD
ORGANIZATION: UNIVERSITY OF PUERTO RICO RIO PIEDRAS
SAN JUAN, PUERTO RICO
TRAINING AREA: COR HIGH SCHOOL RESEARCH TRAINING FOR HISPANICS
(POSTDOCTORAL)

DESCRIPTION (Adapted from Applicant's Abstract): This application requests support for an NIMH Career Opportunities in Research Education and Training High School Research Education Grant at the University of Puerto Rico, Rio Piedras Campus. The rationale for the program is based on the need to produce highly qualified researchers that can address the problems of Hispanics in mental health and HIV-AIDS (MHA). The proposed COR program for high school (HS COR) students is a logical development of the NIMH Hispanic COR that has been in operation for seven years. The HS COR program aims to motivate and encourage Hispanic high school students to pursue careers in science disciplines related to behavioral research with emphasis on MHA research areas. The specific aims of the program are to: a) provide structured educational experiences to develop and foster scientific reasoning and critical thinking; b) provide intensive early hands-on experiences in biopsychosocial research with Hispanic populations; c) foster strong mentoring and role models in research; d) provide intensive guidance and counseling with an emphasis in the exploration of research careers, and e) enrich the trainee's science and research educational experiences. To accomplish these aims the program includes six components: a) a research practicum and mentorship experience designed for early experiences in research; b) educational activities centered on a weekly research seminar and workshops; c) co-curricular activities designed to interest students in research careers which consist of weekly research seminars, research workshops, lectures, teaching conferences, participation at scientific meetings, etc.; d) academic and career counseling aimed at encouraging and supporting students for entrance into college (e.g., applications, resume writing, training for SATs, etc.); e) summer training experiences focused on critical and scientific thinking and skills; and f) a set of evaluation procedures to assess both the process and outcome of the program.

GRANT NUMBER: 5 T32 MH19901-06
PROJECT DIRECTOR: ROHDE, CHARLES A, PHD
ORGANIZATION: JOHNS HOPKINS UNIVERSITY
BALTIMORE, MARYLAND
TRAINING AREA: BIOSTATISTICS MENTAL HEALTH/PSYCHIATRY TRAINING PROGRAM
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The Department of Biostatistics requests funding for a training program for Biostatistics in Mental Health and Psychiatry. The training program will be situated in the Department of Biostatistics and will take advantage of courses in Mental Hygiene, Epidemiology as well as courses in Psychiatry and Behavioral Science. The basic aims are two-fold: (1) to produce students with Ph.D.'s in biostatistics, and the equivalent of a master's degree in Mental Hygiene, who have strong interest and training in the application of statistics to mental health and psychiatry; and, (2) to provide training in biostatistics for postdoctoral fellows (physicians) with interests in mental health to strengthen their quantitative capabilities. Both of these aims are designed to provide the fields of mental health and psychiatry with biostatisticians having an appreciation for and understanding of the public health and scientific issues in mental health and psychiatry. Statistics and biostatistics have long received their stimulus from careful attention to the analysis of data and methodological developments in other areas of science. The development of this training program will provide the department with an opportunity to train professionals who will influence methodologies appropriate to the needs of modern research in mental health and psychiatry. The strengths in generalized linear models, longitudinal data analysis, and statistical inference are particularly appropriate to train students capable of developing new methodologies directly applicable to, and influenced by development in mental health and psychiatry. Some examples include latent class analysis, structural equation modeling, and genetic linkage

analysis. The existence at Hopkins of the Prevention Research Center and the Epidemiologic Catchment Area study in the Department of Mental Hygiene will ensure that students are aware of the research potential for statistics in mental health. The Psychiatric Epidemiology training program in the Department of Mental Hygiene will provide opportunities for collaboration between students in these two programs, which will in turn lead to long-term relationships and involvement in mental health research.

GRANT NUMBER: 1 T32 MH20004-01
PROJECT DIRECTOR: ROOSE, STEVEN P, MD
ORGANIZATION: COLUMBIA UNIVERSITY HEALTH SCIENCES
NEW YORK, NEW YORK
TRAINING AREA: CLINICAL RESEARCH TRAINING IN GERIATRIC PSYCHIATRY
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): It is projected that 35% of the American population will be aged 65 or greater by 2005, with explosive growth in the number of individuals with late life (and very late life) psychiatric disorders. There is a paucity of well trained and committed clinical researchers focusing on critical issues in geriatric psychiatry. This new application for a post-doctoral training program is intended to help address this problem. The training program will take special advantage of the integrated clinical research facilities in geriatric psychiatry at Columbia University, particularly the Late Life Depression Research Clinic, the Memory Disorders Clinic, the ADCRC, the Sergievsky Center, and the Stroud Center for Geriatrics and Gerontology. The intent of this proposal is to train outstanding young psychiatrists and PhDs to provide the next generation of independent primary investigators in late life psychiatric disorders. We request support for awarding three fellowships per year, with successful fellows completing a three-year training program. The most critical component of the training program is the mentor-trainee relationship. Each trainee apprentices with a preceptor who has a proven track record of scientific productivity, funding, and successful mentoring. While developing and executing their own research protocols, the fellows are integrated into the mentor's research group and participate in larger ongoing projects in geriatric psychiatry. A broader affiliated faculty is available for consultation and collaboration with fellows and their mentors. Fellows' clinical responsibilities are only for patients participating in research protocols and cannot exceed 20% of their effort. This ensures maximal commitment to developing clinical research skills. The didactic curriculum includes: 1) introductory and advanced courses in statistics; 2) a research design course; 3) a two-year sequence devoted to special topics in geriatric psychiatry; 4) a weekly seminar in research skills; and 5) course work at Columbia University (e.g., School of Public Health) tailored to the needs of the individual fellow. In addition to the common didactic sequence, each fellow is assigned a statistics tutor. Given the need to enhance recruitment of physicians to this field, this proposal also contains special programs for involving medical students and residents in clinical research in geriatric psychiatry.

GRANT NUMBER: 5 T32 MH19731-07
PROJECT DIRECTOR: ROSS, LEE D, PHD
ORGANIZATION: STANFORD UNIVERSITY
STANFORD, CALIFORNIA
TRAINING AREA: TRAINING IN SOCIAL PSYCHOLOGY
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The training program in Social Psychology seeks to develop researchers capable of contributing to our understanding of social phenomena and underlying processes. Formal courses, research and special area seminars, and the traditional, close research apprenticeship relationship are employed to enhance the trainees' skills in conceptual analysis and theory development, in the design, execution, and analysis of empirical studies, and in application of theoretical insights to important social problems and issues. The overlapping research interests of the Social faculty make the integration of basic theory analysis of social problems

and design of fruitful interventions a natural goal for our students. Faculty members and their students are currently investigating the role of basic cognitive and affective processes in the development and treatment of specific mental health disorders (e.g., depression and social isolation), in the generation of intergroup conflict and the resolution of disputes, and in the amelioration of educational difficulties. This training program generally demands four years beyond the Bachelor's degree and follows the requirements of the doctoral degree program on the Psychology Department. Students, in consultation with the faculty, plan a program of courses best suited to their special interests and professional aspirations. From the outset of the program, they spend one-half time in research under faculty supervision, and they are encouraged not only to obtain research experience in several different areas of social psychology but also to cross traditional discipline lines by working with faculty in cognitive or personality psychology. Several interdisciplinary programs at Stanford (e.g., the Center for Youth Development, the Psychology and Law program, the Feminist Studies program, and the Center for the Study of Conflict Resolution) offer additional research and educational opportunities for our students. Approximately 55 students apply each year for admission to the social program. Those who show outstanding promise enter the program. The majority of our graduates takes academic positions in teaching and research, but a significant number elect positions in applied settings concerned with health care or education. The Psychology Department has a large building with ample space for teaching, research, and offices. It maintains extensive laboratories and supporting shop facilities, and offers a number of computer systems and minicomputers for the running of psychological experiments, simulation, data analysis, and so forth.

GRANT NUMBER: 5 T32 MH15330-21
PROJECT DIRECTOR: ROSS, CHRISTOPHERA R R, MD
ORGANIZATION: JOHNS HOPKINS UNIVERSITY
BALTIMORE, MARYLAND
TRAINING AREA: INTERDISCIPLINARY TRAINING IN PSYCHIATRY & NEUROSCIENCE
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The purpose of this interdisciplinary program is to provide postdoctoral neuroscience research training in areas relevant to the biological basis of mental disorders. The training program is jointly sponsored by the Department of Psychiatry and Behavioral Sciences and the Department of Neuroscience at The Johns Hopkins University School of Medicine. The core faculty all have primary or secondary appointments in either of these two departments and have an established record of collaborative interaction. The program supports 6 fellows per year with support for 2 fellows coming from a supplement for AIDS related research training. The research interests of the core faculty represent the major subdisciplines of the neurosciences including physiological psychology, neurochemistry, neurophysiology, neuroanatomy, psychopharmacology, neuropsychiatry, biological psychiatry, and the neuropsychiatric consequences of AIDS. The primary vehicle for training is supervised research in the laboratory of one of the core faculty members combined with an organized didactic teaching program in relevant aspects of clinical psychiatry and neuroscience. The training program provides a unique opportunity for the Ph.D.'s and M.D.'s to obtain training in basic neuroscientific research at the postdoctoral level oriented towards the appreciation of the relatedness of basic neurosciences to clinical psychiatry. The ultimate goal of the program is to prepare future academic researchers to undertake a career in the investigation of the basic biological processes involved in mental disorders.

GRANT NUMBER: 2 T32 MH14567-23
PROJECT DIRECTOR: SALKEVER, DAVID, PHD
ORGANIZATION: JOHNS HOPKINS UNIVERSITY
BALTIMORE, MARYLAND
TRAINING AREA: OPERATIONS RESEARCH AND ECONOMICS IN MENTAL HEALTH
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The program will train predoctoral students in the economics of mental health. The current demand for well-trained health economists is high and growing. Health economists with concentrations in mental health are attractive to government, universities and private research organizations. Many of the most pressing issues in mental health policy lend themselves to contributions from economic analysis. The proposed training program seeks to provide trainees with 1) strong skills in microeconomic theory and econometrics; 2) a solid knowledge base regarding the nature of mental disorders and the structure of the service system; and 3) a set of structured research experiences in mental health service research. The Johns Hopkins-Maryland Center for Research on Service for Severe Mental Illness, and the Johns Hopkins Center for Youth Mental Health Services Research provide a rich training environment. The academic program at Johns Hopkins draws upon a rigorous curriculum for the Ph.D. in health economics, nationally recognized Departments of Psychiatry and Mental Hygiene, strong ties to the Department of Psychiatry at the University of Maryland, strong working relationships with relevant Maryland agencies, and a new commitment to applied microeconomics in the Department of Economics. The core faculty are experienced in training and research and have established an excellent track record for trainee productivity in mental health service research and related research areas during the history of the training program.

GRANT NUMBER: 1 R25 MH57418-01
PROJECT DIRECTOR: SANDERS, RAYMOND E, PHD
ORGANIZATION: UNIVERSITY OF AKRON
AKRON, OHIO
TRAINING AREA: DEMENTIA RESEARCH AND TRAINING EXPERIENCE
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This proposal involves creating a practicum course for doctoral students in The University of Akron's Applied Cognitive Aging Psychology program, which would last for six weeks. The course would be administered through The University of Akron, and training would be conducted primarily through the Myers Research Institute of the Menorah Park Center for the Aging; Menorah Park's campus includes a variety of facilities and services for dementia care. The aim of this proposal is to provide the graduate students with a strong theoretical and applied research background for creating interventions for persons with dementia. This would be done through four primary means: exposure to experts in dementia and intervention, who would present colloquia and informal meetings and seminars with those associated with the program; exposure to ongoing research activities at the Myers Research Institute; exposure to case presentations / randrounds / interdisciplinary case conferences involving staff from different clinical divisions of Menorah Park; and individually created, implemented, and assessed interventions for each student under the supervision of staff of the Myers Research Institute. The program thus has four shorter-term aims: a) To increase the knowledge of doctoral students regarding causes, symptoms, and behavioral manifestations of dementia (to be assessed through exam); b) to facilitate students' understanding of how research is conducted in applied settings, such as that at Menorah Park; c) to facilitate students' appreciation of interdisciplinary team processes through exposure to team treatment activities at Menorah Park; and, d) to enable students to effectively design and assess interventions for persons with dementia within adult day care or long-term care settings, as assessed by staff evaluation of individual students' projects. The long-term goal is to provide researchers and, ultimately, practitioners with the means of employing psychological interventions as an approach to the treatment of those with dementia.

GRANT NUMBER: 5 T32 MH19732-07
PROJECT DIRECTOR: SANDERS-BUSH, ELAINE, PHD
ORGANIZATION: VANDERBILT UNIVERSITY, SCHOOL OF MEDICINE
NASHVILLE, TENNESSEE
TRAINING AREA: CELLULAR AND MOLECULAR NEUROSCIENCE TRAINING
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This application requests support for the Cellular and Molecular Neuroscience Training Program at Vanderbilt University. The program was established in 1991 to provide graduate and postgraduate training for individuals pursuing a research career in neuroscience. For the past decade, neuroscience has been a focus of faculty recruitment in the School of Medicine, creating a nucleus of faculty interested in interdisciplinary neuroscience training. These faculty joined together to develop the current training program that focuses on cellular and molecular neuroscience to emphasize the strengths of the faculty and the opportunities for linkage between molecular and clinical neuroscience. The initial application was funded in 1992. Since then, ten additional faculty have been recruited; a first-year interdisciplinary graduate program providing comprehensive training in biochemistry, cell biology, genetics, and molecular biology has been implemented; and a new Center for Molecular Neuroscience has been established. These initiatives as well as new graduate courses, seminar series, and several cross-departmentally-sponsored activities have created a rich environment for interdisciplinary training in neuroscience. To take advantage of the increased number of neuroscience faculty and improved training environment, this application requests increased funding for predoctoral and postdoctoral slots. The program is designed to provide graduate students with an integrated training that consists of a strong foundation in the fundamentals of biochemistry, molecular biology, cell biology, and genetics – building on this base with advanced courses in membrane excitability, synaptic transmission, and nervous system development - combined with rigorous in-depth training in research. The principal focus of postdoctoral training is research. Although both predoctoral and postdoctoral training emphasize a research career, several training experiences have been designed to develop teaching and leadership skills. Each of the training faculty has a peer-reviewed, contemporary research laboratory offering training opportunities in chemical and electrical signaling in the nervous system, neurogenetics, neuronal development, neurotoxicity, regulation of gene expression, and biological basis of neuropsychiatric diseases.

GRANT NUMBER: 5 T32 MH19535-08
PROJECT DIRECTOR: SATZ, PAUL, PHD
ORGANIZATION: UNIVERSITY OF CALIFORNIA, LOS ANGELES
LOS ANGELES, CALIFORNIA
TRAINING AREA: NEUROPSYCHOLOGY AIDS FELLOWSHIP
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This application is for the "Neuropsychology of HIV/AIDS Fellowship" at UCLA. The applicants will continue to train postdoctoral fellows each year, with each fellow receiving funding for 2 years. This is a primarily research-oriented fellowship. The applicants propose to place increased emphasis on the integration of neuropsychological research with functional neuroimaging and other measures of brain function. Fellows will also receive clinical training in the evaluation of HIV/AIDS patients and will perform neuropsychological assessments on at least two HIV-seropositive patients per week. The applicants will target recruitment of members of traditionally underrepresented groups.

GRANT NUMBER: 1 R25 MH58560-01
PROJECT DIRECTOR: SAXENA, KRISHAN M, PHD
ORGANIZATION: GRAMBLING STATE UNIVERSITY
GRAMBLING STATE, LOUISIANA
TRAINING AREA: NIMH HONORS MINORITY HIGH SCHOOL PROGRAM AT GSU
(PREDOCTORAL)

DESCRIPTION (Adapted from Applicant's Abstract): The broad objectives of the NIMH - Honors Minority High School Program (HMHSP) at Grambling State University focus on stimulating the interest of ethnic/racial minority high school juniors and seniors in biomedical and behavioral sciences and motivating them to pursue graduate education and careers in research related to mental health. The objectives include (1) Widening and strengthening the science and behavioral science knowledge base, (2) Developing research skills, and (3) Encouraging participation in the bio-behavioral and behavioral research and discussions. NIMH-HMHSP at Grambling State University will pursue these objectives by 1) selecting honor high school junior students who have demonstrated interest in biomedical/behavioral area; 2) pairing each student with a research mentor for a hands-on research experience; 3) pairing each student with a NIMH-COR undergraduate junior trainee as a role model; 4) inviting students to attend NIMH-COR seminars given by visiting scientist; 5) requiring students to do library work and submit a report of their work; 6) requiring students to take undergraduate freshman psychology course for credit; 7) counselling students about research career opportunities available in bio-behavioral and biomedical areas.

GRANT NUMBER: 2 T34 MH17102-16
PROJECT DIRECTOR: SAXENA, KRISHAN M, PHD
ORGANIZATION: GRAMBLING STATE UNIVERSITY
GRAMBLING, LOUISIANA
TRAINING AREA: NIMH COR HONORS MINORITY HIGH SCHOOL PROGRAM AT
GRAMBLING STATE UNIVERSITY
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The primary goal of the COR Program at Grambling State University is to increase the number of well-prepared minority college graduates for entry into doctoral level degree programs in disciplines related to alcohol, drug abuse, and mental health with an emphasis on the biological and neurosciences by completing a two-year interdisciplinary honors training curriculum which will permit trainees to compete successfully for entry into Ph.D. or M.D. programs. Trainees selected will have completed two full years of college work and will be majoring in Biology, Chemistry, Psychology, or Criminal Justice. To be selected, each trainee must have: 1) a G.P.A. of 3.0 or better; (2) expressed a keen interest in graduate study in areas related to alcohol drug abuse, or mental health; and 3) completed the application process and provided two letters of recommendation. The training program consists of a special 19 semester-hour curriculum in addition to major department requirements. It focuses on knowledge and skills in research, scholarly writing, critical thinking, and communication, which are essential for success in graduate study and a research career. The curriculum includes an instructional component, a guidance component, and a research component which culminate in an individually-designed research project and presentation of findings. The procedures and methods include lectures, seminars, discussions, audiovisual aids, individualized tutorials, computer literacy, laboratory research, research internship at a distinguished university, field trips, and intensive instructions and guidance for passing the GRE and MCAT examinations. The academic and research training will involve the disciplines of biology, chemistry, and psychology or criminal justice. Junior and senior trainees will comprise the enrollment. Because trainees remain in the program for two years, each year new trainees will be selected at the junior level. The laboratories, classrooms, offices, libraries, and computer facilities of Grambling State University will be used for instructional and research purposes. Cooperating institutions such as the Institute for Behavioral Genetics in Boulder, the Alcohol Research group of the Medical Research Institute of San Francisco, and the University of California in Berkeley will provide facilities for the summer research internships.

GRANT NUMBER: 5 T32 MH19938-05
PROJECT DIRECTOR: SCHATZBERG, ALAN F, PHD
ORGANIZATION: STANFORD UNIVERSITY
STANFORD, CALIFORNIA
TRAINING AREA: A BIOBEHAVIORAL RESEARCH TRAINING PROGRAM
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The intent of this training program is to prepare psychiatrists and psychologists for a career in clinical research. Support is requested for Ph.D. and M.D. trainees. The principal focus of training is to provide a relevant clinical research experience with mentorship by one of the core faculty members. Additionally, two seminars will provide a critical knowledge base in research design, methodology, and applicable assessment procedures necessary for the conduct of clinical research in the affective disorders, anxiety disorders, and eating disorders. Trainees will also have access to a wide array of more specialized course work. All trainees will be required to attend the medical school seminar series on research ethics. The research training is based on a careful match between the trainee and a faculty preceptor, with a minimum of a 2-year training period. An executive committee, representing the principal areas of clinical research and the principal research sites, provides program oversight and continual review.

GRANT NUMBER: 2 T32 MH18828-12
PROJECT DIRECTOR: SCHEFFLER, RICHARD M, PHD
ORGANIZATION: UNIVERSITY OF CALIFORNIA
BERKELEY, CALIFORNIA
TRAINING AREA: TRAINING IN MENTAL HEALTH FINANCE & SERVICE DELIVERY
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The University of California at Berkeley, School of Public Health, Program in Health Policy and Administration, and the School of Social Welfare co-sponsor this multidisciplinary training program in mental health services research. The program provides graduate training and education to prepare a select group of mental health professionals and scholars for research careers in the organization, financing, and delivery of mental health services. The training program draws on the resources of the two schools to train mental health services researchers at both the predoctoral and postdoctoral levels. The training curriculum is designed to provide rigorous didactic course work followed by the execution of a mental health research project. Given their diverse backgrounds, trainees follow an individualized course of research and study. Programs include courses in health care organization and finance, mental health policy, research, and quantitative methods; core research seminars; optional internships; supervised research; and the completion of research papers suitable for publication in a professional peer-review journal.

GRANT NUMBER: 1 R25 MH58772-01
PROJECT DIRECTOR: SCHENSUL, JEAN J, PHD
ORGANIZATION: INSTITUTE FOR COMMUNITY RESEARCH
HARTFORD, CONNECTICUT
TRAINING AREA: MINORITY YOUTH ACTION RESEARCH TRAINING INSTITUTE
(HIGH SCHOOL)

DESCRIPTION (Applicant's Abstract): The proposed 5-year project, called the Minority Youth Action Research Training Institute, includes a 7-week intensively summer mental health and social/behavioral science research training program with year-long follow-up activities for 20 academically underserved, high achieving urban youth for each of 3 years, with follow-up evaluation of youth participants for an additional 2 years after program completion. The core of the program will be a mental health, substance abuse, and AIDS-related group research project in which participants develop research methods with adult research support, collect information from a designated target population (usually their peers), learn how to manage and analyze the data, and produce study results, policy recommendations, and educational products to be used in their communities and schools. The program will place a high degree of emphasis on the use of "ethno-epidemiology," the integration of anthropological and survey research methods in behavioral research. In addition to these core activities, the proposed program will utilize research mentorships, mental health role models, college and university exposure, and community and ethnic/cultural experiences designed to enhance cultural knowledge, inter-cultural competence, and an increased sense of the utility of research and the viability of a mental health research career, leading to an increased motivation for college entry, graduate study, and later recruitment into a mental health research positions. The aims of the proposed Training Institute are to: 1) refine an existing applied health and mental health ethnography and behavioral sciences research curriculum focused on HIV/AIDS for use with high school-aged urban youth; 2) conduct and evaluate an annual 8-week National Teen Action Research Center-run Youth Action Research Institute with related year-round follow-up, dissemination and support activities each year for 3 years, with a total of 60 ethnically diverse high school students (20 each year) from inner-city communities in the Capital Region in Connecticut; 3) create and evaluate a mobility structure for minority youth to ensure continuity of exposure to mental health research during the high school years and access to higher education; 4) involve youth researchers in evaluating the influence of the proposed program on the lives and decisions of participating youth over a 5 year period; 5) document, evaluate and disseminate this national recruitment and training model and research results through the National Teen Action Research Center (NTARC) Website (by youth) and at national and international meetings of mental health and behavioral research scientists. Collaboration with the University Connecticut Center for International Community Health Studies, affiliation with the Yale-based Center for Interdisciplinary Research on AIDS (CIRA), and collaboration with Central Connecticut State University and several other institutions of higher learning, public, and private organizations provides the base for learning and links with other scientists.

GRANT NUMBER: 5 T32 MH18917-10
PROJECT DIRECTOR: SCHNEIDERMAN, NEIL, PHD
ORGANIZATION: UNIVERSITY OF MIAMI, CORAL GABLES
CORAL GABLES, FLORIDA
TRAINING AREA: BIOPSYCHOSOCIAL RESEARCH TRAINING IN IMMUNOLOGY AND AIDS
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This program would provide multidisciplinary research training in biopsychosocial aspects of immunology and AIDS. Training will be closely coordinated with ongoing research in the applicant's NIMH program project (P01) and investigator initiated research projects (R01). Predoctorals will ordinarily be graduate students in Psychology (Health Psychology/ Behavioral Medicine). Postdoctorals will be M.D.'s and/or Ph.D.'s with interests in immunology, behavioral medicine, and AIDS. Trainees will have offices in the Behavioral Medicine Research Center and/or in the E.M. Papper Clinical Immunology Laboratory and/or in the Center for the Biopsychosocial Study of AIDS. They will participate in a weekly psychoneuroimmunology seminar,

undergo rotations in the immunology, biochemistry assay, and statistics core laboratories, and will gain experience working on research projects with several training faculty members. One faculty member will be designated as primary preceptor. All graduate trainees and some postdoctoral trainees will be exposed through coursework to experimental design and statistics as well as psychosocial, biobehavioral, and pathophysiologic perspectives on immune function and disease progression. Coursework in the Department of Microbiology and Immunology is strongly encouraged. This training grant program is unique for several reasons. First, available for study is a large population of HIV-infected individuals and AIDS patients. Second, an available medical complex is the major treatment center for AIDS patients in Florida and one of the largest in the world. Third, a substantial number of extramurally funded research projects exists, including an NIMH program project, which are investigating relationships among psychosocial variables, endocrine and immune activity, and HIV. Fourth, a collegial, interactive faculty exists with demonstrated expertise in immunology, internal medicine, psychiatry and psychology as these disciplines relate to psychoneuroimmunology and AIDS. Fifth, a large pool of trainee applicants is available who is both qualified and interested in entering the training program and developing research careers. Sixth, the training faculty is experienced in conducting collaborative research and training in biopsychosocial aspects of immunology and HIV; they have effectively worked together in administering the training grant.

GRANT NUMBER:	5 T32 MH20016-02
PROJECT DIRECTOR:	SCHULMAN, HOWARD, PHD
ORGANIZATION:	STANFORD UNIVERSITY STANFORD, CALIFORNIA
TRAINING AREA:	NEUROSCIENCES RESEARCH TRAINING (PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The goal of the Neurosciences Ph.D. Program is to train predoctoral Ph.D. students to become leaders in neuroscience who will help us understand how the nervous system functions, from molecules to systems, from embryo to adult, and in normal and diseased states. The training program has been designed to be broadly-based during the first two years, prior to full-time thesis work. It includes courses in a set of core areas to make students fluent in the multidisciplinary language and approaches of the neurosciences. Rotations in three to four labs allow them to experience the intellectual atmosphere of several lab groups, to become familiar with invaluable experimental approaches, and enable them to make a more informed choice of thesis mentor and research area. These program elements provide students with a foundation for understanding the molecular, cellular, and systems/behavioral elements that enable the nervous system to function in an integrative manner. The program also includes a retreat, seminars, and invited lecturers. Support is requested for trainees, some of which are to be shifted from the existing NIMH and NIGMS training grants. There are many students in the program, including the incoming group that will matriculate in the fall. All students will be enrolled in Stanford University's interdepartmental Neurosciences Ph.D. Program, the only academic body at Stanford that awards a Ph.D. in neurosciences. The faculty is composed of 47 members from 12 departments in the School of Medicine and in the School of Humanities and Sciences. The faculty is highly interactive, well supported, and diverse. Their research interests cover nearly every aspect of the structure and function of the nervous system including organization of pathways, sensorimotor integration, synaptic transmission and membrane excitability, structure and function of receptors and ion channels, neurohormones, gene expression, neural development, plasticity, and regeneration. The program committee, which reflects the broad interests of the program faculty, will select trainees and monitor their progress. Selection is on the basis of scholastic achievements, GRE scores, letters of recommendation, and interviews. The positions will be advertised nationally and applications will be solicited in accord with, and in the spirit of, affirmative action. Past trainees of the program have been extremely successful in pursuing research careers.

GRANT NUMBER: 5 T32 MH17047-17
PROJECT DIRECTOR: SCHULMAN, HOWARD, PHD
ORGANIZATION: STANFORD UNIVERSITY
STANFORD, CALIFORNIA
TRAINING AREA: NEUROSCIENCES TRAINING PROGRAM
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The aim of the Neurosciences Program is to train predoctoral Ph.D. students to become leaders in neuroscience. Teaching them how to approach and solve research problems will help them advance our understanding of the mechanisms that underlie the function of pathways in the nervous system and how the information conveyed by different pathways is integrated to regulate behavior. To this end the program will provide students with the opportunity to conduct state-of-the-art neurobiological research in any of a broad range of disciplines including molecular and cellular biology, genetics, biophysics, electrophysiology, biochemistry, anatomy, computer modeling and behavior. Through formal course work students will be required to examine concepts on how the nervous system functions, from molecules to systems, from embryo to adult, and in normal and diseased states. The program also includes retreats, seminars and invited lecturers. All students will be enrolled in Stanford University's interdepartmental Neurosciences Ph.D. Program, the only academic body at Stanford that awards a Ph.D. in the neurosciences. The faculty is composed of 45 members from 11 departments in the School of Medicine and in the School of Humanities and Sciences. The faculty is highly interactive, well supported and diverse. Their research interests cover nearly every aspect of the structure and function of the nervous system including organization of pathways, sensorimotor integration, synaptic transmission and membrane excitability, structure and function of receptors and ion channels, neurohormones, gene expression, neural development, plasticity, and regeneration. Trainees are encouraged to rotate through three labs before committing to a preceptor. Course requirements cannot be fulfilled in any one department, and the advisory committee for each student will include members from two or more departments. The Program Committee, which reflects the broad interests of the program faculty, will select trainees after consulting with the entire faculty and will monitor their progress. Selection is on the basis of scholastic achievements, national board examination scores, letters of recommendation, and interviews. The positions will be advertised nationally, and applicants will be solicited in accord with, and in the spirit of, affirmative action. Past trainees of the program have been extremely successful in pursuing academic research careers.

GRANT NUMBER: 5 T32 MH18828-12
PROJECT DIRECTOR: SEGAL, STEVEN P, PHD
ORGANIZATION: UNIVERSITY OF CALIFORNIA, BERKELEY
BERKELEY, CALIFORNIA
TRAINING AREA: TRAINING IN MENTAL HEALTH FINANCE & SERVICE DELIVERY
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The University of California at Berkeley, School of Public Health, Program in Health Policy and Administration, and the School of Social Welfare co-sponsor this multidisciplinary training program in mental health services research. The program provides graduate training and education to prepare a select group of mental health professionals and scholars for research careers in the organization, financing, and delivery of mental health services. The training program draws on the resources of the two schools to train mental health services researchers at both the predoctoral and postdoctoral levels. The training curriculum is designed to provide rigorous didactic course work followed by the execution of a mental health research project. Given their diverse backgrounds, trainees follow an individualized course of research and study. Programs include: courses in health care organization and finance, mental health policy, research, and quantitative methods; core research seminars; optional internships; supervised research; and the completion of research papers suitable for publication in a professional peer-review journal.

GRANT NUMBER: 1 T32 MH20003-01
PROJECT DIRECTOR: SEIDENBERG, MARK S, PHD
ORGANIZATION: UNIVERSITY OF SOUTHERN CALIFORNIA
LOS ANGELES, CALIFORNIA
TRAINING AREA: TRAINING IN COGNITIVE AND COMPUTATIONAL NEUROSCIENCE
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Applicant's Abstract): This proposal is a request for funds to support three predoctoral and one postdoctoral trainees in the area of Cognitive and Computational Neuroscience. Cognitive Neuroscience is an emerging discipline at the intersection of the cognitive and neurosciences. The goal of this research is to understand human behavior in terms of its brain bases. Computational modeling plays an essential role in this endeavor, providing a theoretical framework for understanding both high level cognition and basic brain mechanisms. The goal of the training program is to develop future cognitive neuroscientists who will be able to advance the goal of understanding brain-behavior relationships, using computational modeling as a primary tool. The preceptors are 12 faculty from the neuroscience doctoral program and the departments of psychology, linguistics, and computer science, from which trainees will be drawn. Research activities focus on three substantive areas: language; vision; and learning and memory. The training plan focuses on courses and other activities that will allow trainees to integrate cognition, computational, and neurosciences approaches in conducting research in these areas. The plan for the postdoctoral position focuses on permitting a student trained in psychology or linguistics to gain additional expertise related to cognitive and computational neuroscience.

GRANT NUMBER: 1 R25 MH58818-01
PROJECT DIRECTOR: SELZER, MICHAEL E, MDPHD
ORGANIZATION: UNIVERSITY OF PENNSYLVANIA
PHILADELPHIA, PENNSYLVANIA
TRAINING AREA: CLINICAL RESEARCH EDUCATION IN MENTAL HEALTH
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The University of Pennsylvania School of Medicine (PENN) has developed a unique and exciting program to prepare promising medical students to become leaders at the cutting edge of clinical neuroscience practice and research. The present proposal is aimed at enhancing this program in such a way as to further encourage its students to enter research careers in mental health. The advent of managed care has placed academic medical centers under severe economic pressures to trim research and education budgets. Medical students are aware of these trends and are discouraged from pursuing research careers. MD/PhD programs encourage students interested in basic research, but few mechanisms exist for nurturing clinical researchers. In an attempt to counter these tendencies, PENN has created the Clinical Neuroscience Tract (CNST). This program identifies incoming medical students who are interested in the clinical neurosciences, develops in them an esprit de corps with each other and with the clinical neuroscience faculty, and trains them in the skills of scientific thinking necessary to evaluate and participate in clinically relevant research. Students also perform a research project. The CNST has been very successful and after four years, has grown to over 100 students. Thus it can no longer be run without cost sharing by extramural sources. The existing CNST will now be modified in ways that will further strengthen the exposure of its medical students to mental health research. The following specific aims are proposed: Aim 1. To identify incoming medical students who may be interested in research in mental health, expose them to mental health related research throughout their medical school careers and instill in them the skills of critical thinking necessary to evaluate this research. Aim 2. To provide the students with research experiences during medical school, in order to encourage them to consider careers in mental health research. Aim 3. To maintain contact with these students after they graduate in order to assist them with their career development, as well as to monitor the success of the program. Participation by minorities and women will be strongly encouraged. The CNST will be administered by a director with the assistance of a coordinator. There will be two major committees ? an educational planning committee and a research committee. It is

expected that each year, 15 of the initial 20-30 students will complete the entire program, including the research project. This program will increase the number of physicians entering careers in mental health research and serve as a model for other medical schools to emulate.

GRANT NUMBER: 5 T32 MH16434-19
PROJECT DIRECTOR: SHAFFER, DAVID, PHD
ORGANIZATION: COLUMBIA UNIVERSITY HEALTH SCIENCES
NEW YORK, NEW YORK
TRAINING AREA: RESEARCH TRAINING IN CHILD PSYCHIATRY
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The Child Psychiatry Research Training Program at Columbia University/New York State Psychiatric Institute has been designed to increase the cadre of investigators trained to undertake quality research in child and adolescent psychopathology. The psychiatric disorders of childhood and adolescence are common and cause considerable distress and impairment, yet they remain generally poorly studied and understood. The aims of the current proposal are to support to M.D. and/or Ph.D. trainees for up to 3 years, offering them a strong trainee-mentor relationship and training opportunities in fields in which the faculty are themselves active. The faculty are principal investigators on 38 externally funded research grants that include projects in the areas of psychopharmacology; psychotherapy; epidemiology; biological aspects of suicide, anxiety, and antisocial disorders; family genetic research into the affective and anxiety disorders; and the development of new diagnostic measures. The research training climate is enhanced by the presence of the Clinical Research Center that supports trainee research through pilot grants, subject recruitment and screening and consultation and advice on research design and analysis. Evidence of the program's accomplishments is that of the 29 fellows who during the past ten years have been or are currently research fellows, 4 received substantial career development awards from NIMH or foundations; 7 received investigator grant support from foundations; and 4 were principal investigator on a total of 12 externally funded NIMH Project grant awards.

GRANT NUMBER: 5 T32 MH19987-02
PROJECT DIRECTOR: SHEA, M TRACIE, PHD
ORGANIZATION: BROWN UNIVERSITY
PROVIDENCE, RHODE ISLAND
TRAINING AREA: RESEARCH TRAINING IN COMBINED TREATMENT MODALITIES
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The aim of the proposed institutional Research Training Program is to train doctoral level psychologists and psychiatrists to conduct independent research in combined pharmacological/psychosocial treatment modalities, and to prepare them for a career in this area. The Brown University Department of Psychiatry and Human Behavior has faculty with expertise in pharmacological, psychosocial, and combined treatment research, and several ongoing research programs in these areas. Treatment research training will be offered within four areas: 1) Mood Disorders; 2) Anxiety and Related Disorders; 3) Addictive Disorders and Comorbidity; and 4) Behavioral Medicine. We proposed to enroll both Ph.D. and M.D. candidates each year for five years. Each trainee will be supervised by a core faculty mentor, will participate in the mentor's ongoing research program, and will be required to develop and implement an independent research project, with input and guidance from his/her mentor. All trainees will be required to participate in a formal core curriculum, including a seminar series in 1) research methods, design, and statistics with special emphasis on treatment study designs and analyses; 2) psychosocial treatment modalities and research; 3) pharmacological treatment strategies and research; 4) diagnostic and outcome assessment; 5) clinical neuroscience; 6) the ethical conduct of research; and 7) grant

writing. In addition, a guided reading and a supplemental course at Brown University will meet the specific training needs of individual trainees.

GRANT NUMBER: 2 T32 MH19879-06
PROJECT DIRECTOR: SHIFFRIN, RICHARD M, PHD
ORGANIZATION: INDIANA UNIVERSITY, BLOOMINGTON
BLOOMINGTON, INDIANA
TRAINING AREA: MODELING OF COGNITION
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This program supports pre- and postdoctoral training in the Psychology Department at Indiana University in the area of modeling of cognitive processes. Eight of the nine core faculty are psychologists. Together they cover a wide range of theoretical techniques and research domains, and comprise one of the strongest cognitive modeling programs in the world. The faculty have state-of-the-art experimental laboratories and computational facilities, all routinely available to the trainees. The trainees will also gain support from 27 affiliated faculty from the Indiana University Cognitive Science Program, in several departments, who use modeling in research and teaching. The predoctoral trainees will take a five year program resulting in a joint Ph.D. degree in Psychology and Cognitive Science, and a Certificate in Modeling in Cognitive Science. The postdoctoral trainees will visit for two years each, taking courses and carrying out research in the laboratories of one or more of the core faculty. "Modeling" comprises a range of techniques used to develop theoretical accounts of cognitive processes, to test these accounts against human experimental data, and to apply such models in practical settings. It also includes quantitative and qualitative approaches, and formal, mathematical, and computer simulation techniques. The domains of applicability cover the entire range of cognition, and applications of knowledge of cognition, including memory and learning, psycholinguistics, visual processes, speech production and perception, categorization and conceptualization, perception, attention and automatism, skill development, decision making, and problem solving. Research in all these areas is rapidly increasing in complexity, due to increases in breadth and depth of problems and theory. Thus, progress increasingly requires a wider range of mathematical and computer simulation skills, and a deeper understanding of such skills. Training will be given in the application of a wide variety of mathematical and computer-simulation modeling techniques, the application of theory to data, including requisite techniques of data analysis, the testing and comparison of models, and the exploration of their theoretical implications. The trainee will also have an area(s) of intensive specialization in which these techniques will be applied. Typically, trainees will have research experience with at least two core faculty, in at least two subject domains involving modeling, and involving both mathematical and computer simulation approaches. They will participate in and present their research in weekly seminars, attend colloquia, and submit their research to professional journals and for presentation at national meetings. The proposed training will provide a breadth and depth of techniques sufficient to enable the trainee to tackle some of the difficult research problems of today.

GRANT NUMBER: 5 T32 MH19890-05
PROJECT DIRECTOR: SHROUT, PATRICK E, PHD
ORGANIZATION: NEW YORK UNIVERSITY
NEW YORK, NEW YORK
TRAINING AREA: QUANTITATIVE TRAINING FOR MENTAL HEALTH RESEARCH
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): Mental health research often requires the consideration of advanced statistical and psychometric methods to adjust for confounding and measurement error, and to model causal processes in non-experimental contexts. Although many of the emerging methods are developed by statisticians and biostatisticians, the application of these methods often falls on the shoulders of persons trained in psychology

departments. In order to develop a cadre of mental health researchers who are well equipped to benefit from advances in quantitative methods, we propose to establish a quantitative training program in mental health research at the Department of Psychology at NYU. The program will provide specific, sophisticated training in psychometrics, statistics and study design to up to six postdoctoral fellows and three predoctoral fellows. The training will draw on the existing curriculum of NYU's Department of Statistics and Operations Research as well as of the Department of Psychology. New courses will also be developed to suit the applied needs of mental health researchers. In addition to providing specific instruction in quantitative methods to mental health researchers, the training program will aim to affect the broader context of the Psychology Department. Fellows will participate in ongoing research projects in clinical psychology, community psychology, and other programs that involve mental health variables. Their emerging expertise in methods such as logistic regression, random regression models and multivariate techniques will allow faculty and other students to appreciate better the statistical methodology that is now available for mental health research.

GRANT NUMBER:	5 T32 MH19098-08
PROJECT DIRECTOR:	SHWEDER, RICHARD, PHD
ORGANIZATION:	UNIVERSITY OF CHICAGO CHICAGO, ILLINOIS
TRAINING AREA:	CULTURE AND MENTAL HEALTH BEHAVIOR TRAINING PROGRAM (PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The Program in Culture and Mental Health Behavior is dedicated to training students in the theory, methods, data collection and analysis necessary to conduct primary research on similarities and differences in psychological functioning across populations and ethnic communities. This Training Program is broadly concerned with study of environmental contexts and community sociocultural systems in which the person develops and mental well-being or illness results. This Program highlights social and psychological forms through which mental duress and illness are classified, diagnosed, and treated, generally seeking to redefine the constitution and ontology of the patient, and to augment the success of relevant healing processes as these are being rethought within the United States. Psychosocial functions of special relevance in the Program include the development of the emotions and moral reasoning, interpersonal functioning, mind functioning, gender and sexual development, and a variety of aspects of psychological well-being and psychopathology. Both optimal mental well-being and psychopathology have been studied in the preceding five years of training by faculty and students. Secondly, we are concerned with understanding community mental health and the understanding of ethnic factors and ethnicity more broadly in the care and delivery of services to immigrant and refugee populations within the United States, in the Mexican-American and Puerto Rican communities in Chicago. Other ethnic populations under investigation by faculty and students involved in the Program include Japanese-Americans, Korean-Americans, African-Americans, and Chinese Americans. Overall the program has two aims: to train research students who show special promise of contributing in creative and applied careers to understanding socio-cultural and environmental predictors of mental health behavior and illness. The Program proposes to admit four Predoctoral students for four years, and three postdoctoral fellows; two Ph.D.'s and one M.D. Our current research and training opportunities include a large range of cross-cultural projects internationally as well as nationally, dealing with mental health, optimal development and psychosocial illness in cultures that span India, China, Japan, Korea, Brazil, New Guinea, Europe (Germany and Holland).

GRANT NUMBER: 5 T32 MH16381-18
PROJECT DIRECTOR: SIGMAN, MARIAN D, PHD
ORGANIZATION: UNIVERSITY OF CALIFORNIA, LOS ANGELES
LOS ANGELES, CALIFORNIA
TRAINING AREA: INTERDISCIPLINARY RESEARCH IN CHILDHOOD PSYCHOPATHOLOGY
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The training program outlined in this grant is designed to provide research training of young investigators at the predoctoral and postdoctoral level in areas of inquiry related to childhood psychopathology. General goals for all trainees will be for them to. 1) Acquire an awareness of all forms of childhood disorders and psychopathology; 2) Be knowledgeable about methods of research design and analysis; 3) Be aware of the current empirical approaches utilized in investigations of childhood psychopathology; and 4) Develop the general and specific skills needed for research careers. Research training will be offered in four thematically organized research tracks: severe psychopathology in childhood and adolescence, family genetic influences, treatment and prevention, and effects of traumatic events on children. Training objectives have been specified for each track. Both the general goals and specific objectives will be met through participation in the research program of, at least, one mentor as well as in a series of didactic seminar designed for this training program and in more specialized courses offered in various schools and departments within the Medical School and University. The proposed plan is for the training of postdoctoral students with medical or doctoral degrees, predoctoral students, and medical students every year. Postdoctoral students must have doctoral or clinical training in a discipline relevant to childhood psychopathology and be committed to a career as a biomedical researcher. Predoctoral candidates will be graduate students in the Psychology Department at UCLA and medical students will be enrolled in the UCLA School of Medicine. The programming integration of trainees and mentors from a variety of disciplines and departments will ensure that this research training is truly interdisciplinary. It is anticipated that trainees will become academic researcher in medical schools, university departments, and research institutes and hospitals.

GRANT NUMBER: 5 R25 MH55712-19
PROJECT DIRECTOR: SLOAN, LLOYD R, PHD
ORGANIZATION: HOWARD UNIVERSITY
WASHINGTON, DIST OF COLUMBIA
TRAINING AREA: HONORS HIGH SCHOOL RESEARCH EDUCATION
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The primary objective of this interdisciplinary program is to provide outstanding high school students with unique and advanced exposure to "hands-on" biobehavioral and psychosocial research to equip and to motivate their interest in, and pursuit of, a research career in the biomedical and behavioral sciences related to mental health. The more specific purpose of this specialized research training and mentorship is to prepare and orient the student toward college education in any of several mental health related academic disciplines. As a consequence of Program participation, these NIMH-COR Honors High School Students will be particularly well-prepared for interdisciplinary undergraduate research programs (e.g., biopsychology). Their qualifications, in addition to professional and disciplinary knowledge and methodological skills, will include the use of small and large computers in diverse research functions including data analysis roles. In general, the program is designed to encourage students' interest in research careers and to sustain that interest by improving greatly their qualifications for gaining entry to, and success in, highest quality college programs and eventual careers in NIMH related research realms. For 3 junior first year and 3 senior second year students, the two year program offers: (1) unique and continuous exposure to, and hands-on participation in, advanced biomedical, biobehavioral and psychosocial research in Mental Health research areas within the disciplines of psychology, zoology, anthropology, sociology and social work at Howard University. The Program's two academic years and two ten-week summer programs will provide, (1) intense mentoring from faculty, graduate students (many supported by the NIMH M-RISP Research Program) and NIMH-COR Undergraduate Honors co-researchers; (2) specialized microcomputer and

mainframe training for a variety of scholarly and research functions; (3) Seminars, many with NIMH-COR undergraduates, that focus on problem conceptualization, logical research progression, methods, and statistics and computers in research; (4) Special skill training for writing, the SAT, study techniques, and (5) Scientific Colloquia to increase exposure to research and to strong career models. Our success is measured in terms of our students' achievements. Of our 10 graduates, all have entered college programs. Enthusiasm in the NIMH-COR High School Program is very strong.

GRANT NUMBER: 5 T34 MH16580-19
PROJECT DIRECTOR: SLOAN, LLOYD R, PHD
ORGANIZATION: HOWARD UNIVERSITY
WASHINGTON, DISTRICT OF COLUMBIA
TRAINING AREA: BIOBEHAVIORAL & PSYCHOSOCIAL DETERMINANTS OF BEHAVIOR
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The primary objective of this interdisciplinary program is to provide outstanding junior and senior undergraduates with unique and advanced exposure to biobehavioral and psychosocial research to equip and to motivate their pursuit of a research career. The more specific purpose of this specialized research training and mentorship is to prepare and orient the student toward graduate education in any of several mental health related academic disciplines. As a consequence of Program participation, these NIMH-COR Honors Students will be particularly well-prepared for interdisciplinary graduate research programs (e.g., biopsychology). Their qualifications, in addition to professional and disciplinary knowledge and methodological skills, will include the use of small and large computers in diverse research functions including data analysis roles. In general, the program is designed to encourage students' interest in research careers and to sustain that interest by improving greatly their qualifications for gaining entry to, and success in, highest quality graduate programs and eventual careers in NIMH related research realms. The two year program has several components: (1) unique and continuous exposure to and participation in advanced biomedical, biobehavioral and psychosocial researching Mental Health research areas within the disciplines of psychology, zoology, anthropology, sociology and social work at Howard University. These will provide intense sources of mentoring from faculty, graduate students (supported by the NIMH M-RISP Research Program) and involving NIMH-COR-High School Honors co-researchers; (2) specialized microcomputer training for a variety of scholarly and research functions; (3) specialized advanced coursework in scientific conceptualization, logical research progression, methods, and statistics and computers in research; and (4) scientific colloquia to increase exposure to research and to strong career models. Our success is measured in terms of our students' achievements. Of our 91 graduates, 21 have Ph.D.'s, 2 M.D.'s, 15 are ABD. 93 percent have entered graduate programs. Enthusiasm in the NIMH-COR Program is very strong.

GRANT NUMBER: 5 T32 MH18390-12
PROJECT DIRECTOR: SMITH, GERARD P, MD
ORGANIZATION: NEW YORK HOSPITAL – CORNELL MEDICAL CENTER
WHITE PLAINS, NEW YORK
TRAINING AREA: POSTDOCTORAL TRAINING IN EATING DISORDERS
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This application is for a training program for postdoctoral persons for research in Eating Disorders. The program lasts two years and consists of a clinical or basic research experience concerned with issues relevant to the understanding and treatment of patients with anorexia nervosa, bulimia nervosa, and binge-eating disorder. This research experience is organized and supervised by a faculty mentor(s) with the appropriate expertise and is supplemented with a core curriculum of lectures and research seminars. The lectures review the current basic and clinical knowledge of eating disorders, introduce the trainee to the

fundamentals of research design, data analysis, and the ethics of human and animal research. The research seminars consist of a biweekly "Data Meeting" concerned with research-in-progress of the trainees and staff, a biweekly Visiting Scientist Seminar, and a monthly Appetite Seminar sponsored by the New York Obesity Center. Each year one of the leading investigators in the field serves as a Visiting Professor for three days with the trainees. The progress of the trainee is monitored on a weekly basis by the mentor, and at six-month intervals by the Executive Committee of the training faculty. Persons that have finished a psychiatric residency or an internship in clinical psychology are prime targets for recruitment, but postdoctoral persons with outstanding credentials and a specific interest in relevant basic research are also considered. Trainees are recruited by advertisements, targeted mailings, and personal contact with appropriate colleagues. Applicants are accepted on the basis of prior research and clinical experience, recommendations, and interviews. We request support for trainees, both first-year and second-year. The training facilities for human research include an inpatient unit and an outpatient clinic for patients with eating disorders, and an inpatient unit and a Day Hospital program for patients with severe personality disorders and eating disorders. Training facilities for animal research are the Bourne Behavioral Research Laboratory, the Laboratory of Molecular Neurobiology, and the Laboratory of Human Behavior & Metabolism.

GRANT NUMBER: 2 T32 MH18823-11
PROJECT DIRECTOR: SPELKE, ELIZABETH S, PHD
ORGANIZATION: MASSACHUSETTS INSTITUTE OF TECHNOLOGY
CAMBRIDGE, MASSACHUSETTS
TRAINING AREA: DEVELOPMENT OF COGNITION
(PREDOCTORAL)

DESCRIPTION (Applicant's Abstract): The mission of the Department of Brain and Cognitive Sciences is to promote an interdisciplinary approach to the study of intelligence, combining the substance and methods of experimental psychology and neuroscience with the formal analyses of linguistics and mathematics. Because two-thirds of the faculty in our department study problems of learning and development, the field of cognitive development is a major unifying intellectual focus. The proposed developmental training program is designed to give 6 predoctoral and 2 postdoctoral students the knowledge, skills, and perspective they will need to pursue research careers in developmental cognitive science, through broad training in the multidisciplinary approaches to development represented by our department. The program emphasizes depth in a student's primary area of concentration. Trainees are expected to conduct research in the laboratories of at least two faculty members, preferably using methods derived from different subdisciplines to confront problems in a single cognitive domain. Trainees also will attend a multidisciplinary developmental seminar throughout their graduate or postdoctoral training. Predoctoral trainees will complete other required course work in the first two years, after which they will take qualifying exams. In succeeding semesters, trainees will choose from a flexible array of courses, seminars, and guided readings under the supervision of faculty advisors. Postdoctoral trainees will also be encouraged to attend seminars to broaden their empirical perspective on cognitive development, and they are expected to take an active role in seminars within their areas of specialization.

GRANT NUMBER: 2 R25 MH55711-14
PROJECT DIRECTOR: STEFANO, GEORGE B, PHD
ORGANIZATION: STATE UNIVERSITY OF NEW YORK COLLEGE AT OLD WESTBURY
OLD WESTBURY, NEW YORK
TRAINING AREA: HIGH SCHOOL HONORS RESEARCH PROGRAM
(HIGH SCHOOL)

DESCRIPTION (Adapted from Applicant's Abstract): The High School Internship Research Program of the Old Westbury Neuroscience Research Institute is designed to increase the number of minority students entering neuroscience/mental health undergraduate programs. The College at Old Westbury is ideally suited to carry out this mission, since it has faculty whose research focus in cellular and molecular neuroscience, and behavior has obtained professional recognition, and relates very well to NIMH interests. The faculty is multiethnic in composition, with also a high percentage of minority students who choose science as a major (65%) - all of whom can be inspiring role models. The faculty interests help to generate relevant student projects at the molecular organismic, and behavioral levels; for example, our major research projects focus on HIV, opiates as neurotransmitters, and nitric oxide involvement in neuroprocessing. A similar high school internship research program has been successfully operating as a supplement to the COR undergraduate training grant. It has already produced Westinghouse semifinalists and competitive research projects. The program benefits from interaction with other college programs, and has already established a solid reputation with area high schools. It extends through the academic year and the summer, and consists of (a) developmental and (b) research components, the latter working in the laboratories of preceptors through the gamut of investigative phases, from proposition to experimentation and conclusion. The facilities and state-of-the-art equipment provide the ideal setting for the learning of advanced laboratory techniques - a rare opportunity for high school students.

GRANT NUMBER: 5 T34 MH17138-16
PROJECT DIRECTOR: STEFANO, GEORGE B, PHD
ORGANIZATION: SUNY COLLEGE AT OLD WESTBURY
OLD WESTBURY, NEW YORK
TRAINING AREA: NIMH COR HONORS UNDERGRADUATE RESEARCH TRAINING
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The proposed Honors Career Opportunity Research Training Grant of the Old Westbury Neuroscience Research Institute is designed to increase the number of minority students entering neuroscience/mental health graduate programs. The College at Old Westbury is ideally suited to carry out this mission since it has faculty that are already interested in neuroscience as well as having recognition in this area. Additionally, it has a multiethnic faculty and a high percentage of minority students that choose science as a major (65%). The faculty have special interests in molecular and cellular neuroscience related to National Institute on Mental Health interests that the students will work on during the year. As part of its infrastructure activities, outside speakers will be invited to give lectures on relevant topics, seminars will be held frequently, as well as calling for an external summer research experience. Furthermore, our program is now in collaboration with the Division of Psychiatry of the Harvard Medical School and the Cardiovascular Research Center at University Medical Center at SUNY Stone Brook. It is with great pride that we point out that our Neuroscience Institute has been given chapter status by the Society for Neuroscience. The three major research training projects (HIV, opiates as neurotransmitters, and nitric oxide involvement in neuroprocessing) incorporated into this student research training proposal are both timely and of significance to NIMH. The faculty publishes in these areas with the trainees as co-authors further demonstrating the high level of training.

GRANT NUMBER: 5 T32 MH19139-10
PROJECT DIRECTOR: STEIN, ZENA A, MD
ORGANIZATION: COLUMBIA UNIVERSITY HEALTH SCIENCES
NEW YORK, NEW YORK
TRAINING AREA: BEHAVIORAL SCIENCES RESEARCH IN HIV INFECTION
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The Behavioral Sciences Research in HIV Infection Training Program is a postdoctoral training program administered through the Department of Psychiatry of Columbia University at New York State Psychiatric Institute that aims to train highly qualified and independent research scientists in the determinants of HIV risk behaviors, the evaluation of models of behavior change, and other vital mental health aspects of HIV infection. As a result of its close association, with the NIMH-funded HIV Center for Clinical and Behavioral Studies at Columbia University and its component research projects, methodologic cores, and satellite grants, the training program offers great breadth as well as depth in research training. Moreover as part of the New York State Psychiatric Institute and the Department of Psychiatry at Columbia University and through its close ties with the School of Public Health at Columbia University and the Columbia-Presbyterian Medical Center, the training program is enriched by an environment of excellence in HIV research and experience in research training. We propose a program of two-year training for postdoctoral trainees each year. The program is preceptorial in structure: trainees are integrated into the preceptors departments, participate in their research, and develop their own projects. Preceptors are for the most part principal or co-principal investigators of HIV Center research projects or methodologic cores. Direct research involvement is supplemented by course work and teaching activities. The program intends to continue appointing a mixture of trainees of with doctoral and medical degrees. For qualified candidates with less research experience, we propose providing tuition towards a Master of Science in Epidemiology or Biostatistics in the School of Public Health.

GRANT NUMBER: 5 T32 MH19908-06
PROJECT DIRECTOR: STEINER, HANS, PHD
ORGANIZATION: STANFORD UNIVERSITY
STANFORD, CALIFORNIA
TRAINING AREA: RESEARCH TRAINING FOR CHILD PSYCHIATRY AND DEVELOPMENT
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This is an application for an NIMH institutional training grant in child and adolescent mental disorders at Stanford University to provide funding for research training. This training program is directed at child psychiatrists and postdoctoral fellows in related disciplines, who plan to enter full-time careers in academic research. The program consists of three tracks, each focusing on a particular aspect of a development pertinent to child and adolescent mental disorders. Collaborative studies, joint seminars, journal clubs, didactics and an annual retreat will accomplish integration of research training between tracks. Each track will be headed by a senior faculty member with expertise in that area. Although specific faculty have been named to participate in each track, trainees will be free to work with any faculty they choose in any department of the University. The training program consists of the following three tracks: a) molecular and developmental neurobiology, headed by Roland D. Ciaranello, M.D., b) clinical research, headed by Hans Steiner, M.D., and c) psychosocial research, headed by S. Shirley Feldman, Ph.D. Each faculty named in this application has agreed to act as the primary mentor for one or more trainees, and to guide that trainee through an intensive research program. The program will also provide comprehensive didactic training. Each trainee will attend a course on biostatistics and research design and a seminar on scientific conduct. Within each track, there will be a core curriculum that will consist of courses relevant to that track. Finally, trainees will be expected to participate in whatever seminars they and their mentor agree will be valuable for their training, choosing from the full array of seminars, conferences and lecture series offered at Stanford. A NIMH child and adolescent mental disorders training grant would help attract more research candidates into child psychiatry and expand the manpower pool of child psychiatric research. In the present time of tight funding

and intense competition for stipends, this training grant specially earmarked for child psychiatry would be of immense help in recruiting talented candidates. This grant would also have an enriching and unifying effect on the applicant institution. It will bring individuals together with common scientific and training interests. As a result of this collaboration, joint research, grants, programs and centers could emerge in subsequent years, and greatly nourish the scientific base in the field.

GRANT NUMBER: 5 T32 MH18372-12
PROJECT DIRECTOR: STIPEK, DEBORAH J, PHD
ORGANIZATION: UNIVERSITY OF CALIFORNIA, LOS ANGELES
LOS ANGELES, CALIFORNIA
PROJECT TITLE: APPLIED HUMAN DEVELOPMENT
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This proposal is for a program that trains doctoral students and postdoctoral fellows as researchers and scholars in applied human development. The goals of the program are to prepare students and fellows 1) to conduct distinguished research that will contribute to the body of knowledge and the discipline of applied human development, and 2) to use theory and research in developmental psychology to address significant social and policy-related problems in applied settings. The principle that runs through the training activities is the convergent focus on ways of understanding and analyzing human development in the context of its social and cultural circumstances. The program emphasized research related to the early identification of children at risk and the prevention of physical and psychological problems in children's development. Research training is combined with supervised experiences in applied settings, to prepare students to do research, consider the implications of research, and communicate with practitioners and policy makers. The proposal requests stipends, tuition and fees, and training-related expenses for predoctoral and postdoctoral fellows.

GRANT NUMBER: 5 T32 MH15161-22
PROJECT DIRECTOR: STRAUS, MURRAY A, PHD
ORGANIZATION: UNIVERSITY OF NEW HAMPSHIRE
DURHAM, NEW HAMPSHIRE
TRAINING AREA: FAMILY VIOLENCE RESEARCH TRAINING
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This is a request for support to train behavioral scientists to conduct research on the causes, consequences, and treatment of family violence. The areas to be included in the research training include the physical, sexual, and emotional maltreatment of children, spouses, and the elderly and its mental health ramifications. The need for such training is seen as acute, with mental health agencies experiencing steadily rising caseloads of abused children and adults suffering from the consequences of child and adulthood abuse. In addition, research is needed to document the connection between family violence and an array of other serious mental health problems such as depression, suicide, and antisocial behavior. This training program, which has been operating for 15 years with a strong record of productivity, will provide research training to an interdisciplinary group of postdoctoral fellows at differing levels of experience. The training experience centers on collaboration with senior faculty colleagues and involvement in an ongoing research seminar. The program makes explicit demands of the fellows for productivity in the writing of articles and grant applications.

GRANT NUMBER: 5 T32 MH16247-18
PROJECT DIRECTOR: STRUPP, HANS H, PHD
ORGANIZATION: VANDERBILT UNIVERSITY
NASHVILLE, TENNESSEE
TRAINING AREA: RESEARCH TRAINING IN PSYCHOTHERAPY
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The program emphasizes research on time-limited dynamic psychotherapy as well as measurement of variables relevant to particular treatment outcomes. The training model is primarily one of apprenticeship and participation in a research team. Training methods include intensive individual research supervision, tutorials, didactic seminars, and hands-on experience in all aspects of a research team. The major aim of the program is to develop in-depth competencies in selected areas. At the predoctoral level, students are members of Vanderbilt University's doctoral program in clinical psychology. At the postdoctoral level, candidates typically have a Ph.D. in clinical psychology (although applications can be accepted from M.D.'s) and are appointed for 2 years. The major training will be in the Department of Psychology and Human Development and the Center for Psychotherapy Research at Vanderbilt University. Additional training will be conducted in the Department of Psychiatry of the John F. Kennedy Center, Vanderbilt University Medical Center, and the Department of Psychology and Human Development at George Peabody College for Teachers.

GRANT NUMBER: 5 T32 MH14588-22
PROJECT DIRECTOR: STRYKER, SHELDON, PHD
ORGANIZATION: INDIANA UNIVERSITY, BLOOMINGTON
BLOOMINGTON, INDIANA
TRAINING AREA: IDENTITY, SELF, ROLE AND MENTAL HEALTH
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The goal of the program is to increase the number of researchers committed to research on mental illness/health who bring sophisticated theoretical and methodological skills to that research. More specifically, the program aims to train pre- and postdoctoral fellows for research in the social psychology of self that relates self and related constructs to mental illness/health. It develops from the premise, evidenced in research and by the centrality of the concept of self and related constructs in social psychological theory, that the self is critical to explaining variation in persons' social and individual behavior in general and persons' mental health/illness-related behavior in particular. It develops from the further premise, also supported in research, that content and impact on behavior of self cognitions are constrained, facilitated or shaped by persons' locations in social groups and larger social structures. Still more specifically, the program aims to encourage research, using the most sophisticated methods available, on the linkages of self to mental health/illness processes and outcomes while recognizing how social relationships and social structures facilitate or constrain those linkages. To achieve these ends, training covers the theory and methods of research on identity, self, role and related constructs. Special emphases in the training are: (1) a concern with both theoretical development in the social psychology of self and application of theories of self to mental health/illness issues; (2) an interdisciplinary orientation, drawing on the literatures of sociology, social psychology, psychology, psychiatry and related fields; (3) interdisciplinary personnel; (4) the application of contemporary measurement and multivariate analytic strategies in theory-driven research on mental health/illness consequences of variation in self; (5) the use of rigorous qualitative methods to complement rigorous quantitative methods; (6) involvement of fellows in continuous research activity, as independent researchers and collaboratively with program faculty and fellows; and (7) participation in an ongoing fellow- faculty seminar in which research plans, progress and accomplishments are presented and critically appraised.

GRANT NUMBER: 5 T32 MH18902-11
PROJECT DIRECTOR: STUNKARD, ALBERT, PHD
ORGANIZATION: UNIVERSITY OF PENNSYLVANIA
PHILADELPHIA, PENNSYLVANIA
TRAINING AREA: YEAR-OUT RESEARCH TRAINING FOR MEDICAL STUDENTS
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This is a continuation of "a year out for research" program for medical students interested in the behavioral neuroscience and health and behavior fields, under the Medical School's Penn Medical Scholars Program which is designed to attract more M.D.'s into careers of research. In the past, these areas of research have included anything from studies of synaptic plasticity in learning or volumetric and cellular changes in Alzheimer's disease to barriers to prenatal care or high-risk sexual behavior of women intravenous drug users in and out of treatment. Faculty members involved in supervising this research have come from anatomy, anthropology, biology, folklore, obstetrics and gynecology, neurology, neurosurgery, pathology, pediatrics, psychiatry, psychology, radiology, sociology, and could come from many other disciplines and departments of the University. Students typically take the year out between the 3rd and 4th years of medical school, but they can take it at any time during their 4 years. Five students a year have been typical of the program. Most students have had undergraduate experience in research and all are qualified in good standing in the medical curriculum by the Dean and have passed the selection process of the Training Committee. Research facilities are available in the well-funded laboratories of the training faculty and in the facilities of the Medical School, Hospital, and University (e.g. libraries, computer facilities, clinics, and animal care facilities).

GRANT NUMBER: 5 T32 MH14268-23
PROJECT DIRECTOR: SWINNEY, DAVID A, PHD
ORGANIZATION: UNIVERSITY OF CALIFORNIA, SAN DIEGO
SAN DIEGO, CALIFORNIA
TRAINING AREA: COGNITION - INFORMATION PROCESSING AND DEVELOPMENT
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The program is designed to present predoctoral and postdoctoral students with an orderly conception of the human organism as an information-processing system. It addresses most topics in human psychology from the point of view of modern cognitive psychology. Faculty include ten members of the Department of Psychology whose main research is in the area of human information processing, another 16 members of this department who contribute importantly because of their substantial interests in perception, attention, memory, and/or social cognition, six members of the Department of Cognitive Science working directly on problems of human information processing, plus some 20 other full-time faculty associated with the Center for Human Information Processing. Trainees receive intensive research and theoretical training on topics including perception, attention, memory, motor control, psycholinguistics, neuropsychology, cognitive development, human/machine interactions, text processing, emotion, instructional design, and formal modeling (including neural/ PDP modeling and stochastic modeling). Requirements stress the acquisition of basic knowledge and subsequent commitment and skills in a specialized area of research. Most of the classroom training is concentrated in the two years of predoctoral work and includes a two-quarter proseminar in cognitive psychology, and competence in three other areas of experimental psychology. Exposure to a large number of ongoing research projects and resident visitors from the U.S. and abroad contribute significantly to the quality of the educational program. Interdisciplinary work in the other social sciences, neuropsychology and neuroscience, philosophy, and within cognate research centers, such as the Salk Institute for Biological Studies, further enriches the program. The program undertakes both pre- and postdoctoral training. There are typically 25-30 predoctoral students in residence doing full time work toward the Ph.D. Four to eight postdoctoral students - coming from a variety of backgrounds but all seeking specialization in cognitive psychology - are typically in residence. However, the number of postdoctoral trainees has fallen off in recent years due to a lack of funds. NIMH support for both predoctoral and postdoctoral trainees is based on the quality of their previous and current work. The

Department of Psychology and the Center for Human Information Processing, which jointly administer the predoctoral portion of the training grant, have extensive laboratory and teaching space within one building. The Department of Cognitive Science, which is also involved in the administration of the postdoctoral portion, has laboratory and office space in two nearby buildings. On-line computers, with half a dozen mainframes and a very large number of high-quality microcomputers control most research. Faculty and students also make extensive use of an interactive computer network for computation and intra- and intercampus communication. Neuropsychological subject populations are available through the Departments of Neuroscience and Psychiatry and the VA hospital on campus.

GRANT NUMBER: 5 T32 MH19104-10
PROJECT DIRECTOR: THOMPSON, LARRY W, PHD
ORGANIZATION: STANFORD UNIVERSITY
STANFORD, CALIFORNIA
TRAINING AREA: RESEARCH TRAINING IN MENTAL HEALTH AND AGING
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): "Research Training in Mental Health and Aging" is an Institutional National Research Service Award application seeking to provide a one year experience for first year postdoctoral psychologists and second year postdoctoral psychologist in each of five years of requested support. Trainees may select one of four research tracks: 1) Neuropsychology, 2) Assessment and Psychotherapy, 3) Behavioral Medicine, or 4) Community Outreach/Prevention. To gain familiarity with methodological and conceptual issues related to the four study tracks they may rotate through an array of sites and services including the Older Adult and Family Center, the Alzheimer Research Center, the Geriatric Education Center, the Geriatric Medical Clinic and the Inpatient Geropsychiatry Program. The Palo Alto VA Geriatric Research, Education, and Clinical Center, Geriatric Evaluation and Management Unit, Geriatric Outpatient Clinic, Andrology (male sexuality) Clinic and the California Alzheimer Diagnosis and Resource Center are also available. Formal course work and experience in data collection and management, statistics, and the opportunity to co-author presentations and publications round out the preparation to complete a chosen project. Trainees will be chosen based on the prior academic performance, research interests and their potential for a clinical research career in service of academic settings.

GRANT NUMBER: 5 T32 MH19384-04
PROJECT DIRECTOR: TOBIN, ALLAN J, PHD
ORGANIZATION: UNIVERSITY OF CALIFORNIA, LOS ANGELES
LOS ANGELES, CALIFORNIA
TRAINING AREA: TRAINING PROGRAM IN MOLECULAR AND CELLULAR
NEUROBIOLOGY
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The techniques and concepts of molecular and cellular biology are increasingly important in the study of neural function and development. Future research in neuroscience will depend heavily on people trained in both systems neuroscience and molecular biology, who know how and when to use specific molecular or cellular techniques to UCLA has over 50 faculty members working in molecular and cellular neurobiology and actively involved in training future researchers in this area. These faculty have vigorous research programs, active commitments to graduate education and a great interest in exactly the kind of interactions that make a strong training program. In addition, both the School of Medicine and the College of Letters and Sciences have committed significant resources to the further strengthening of all aspects of neuroscience, and in particular, for a training program that integrates both the molecular/cellular elements and the systems elements of neuroscience. The UCLA Training Program in Molecular and Cellular Neuroscience will focus on predoctoral training, awarding traineeships to outstanding students in the Interdepartmental Ph.D. Program for Neuroscience at UCLA. The program

currently admits approximately 12 students per year and educates them in all areas of neuroscience. Of these, approximately half are primarily interested in molecular and cellular neuroscience. Students with a primary interest in molecular or cellular approaches to neuroscience research will be selected for four years of support at the end of the second quarter of their first year in the program. UCLA will commit additional fellowship resources to the program so that each trainee will receive up to five years of support. One major benefit of this training program is that participation requires that students maintain interactions with a variety of faculty and students investigating the nervous system from many perspectives. These interactions occur in courses, seminars, activities organized by postdoctoral fellows or students, and the annual neuroscience student retreat. Molecular and Cellular Neuroscience trainees will be encouraged to retain a broad perspective of neuroscience research through their graduate careers.

GRANT NUMBER: 5 T32 MH19950-03
PROJECT DIRECTOR: TOGA, ARTHUR W, PHD
ORGANIZATION: UCLA SCHOOL OF MEDICINE
LOS ANGELES, CALIFORNIA
TRAINING AREA: TRAINING PROGRAM IN NEUROIMAGING
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This is a proposal to establish a Training Program in Neuroimaging to train basic researchers and physician scientists in the scientific aspects of neuroimaging. The breadth of the program encompasses neuroimaging in all biobehavioral sciences from molecular probes to clinical psychiatry, while at the same time providing in depth focus on the theory and practice of neuroimaging strategy, physics, instrumentation, and application. The specific aims of this program are: 1) to provide trainees with the skills necessary to conduct neuroimaging research studies of brain structure and function in experimental animal and human models; 2) to provide trainees with a comprehensive understanding of the use of neuroimaging techniques from wet bench procedures such as optical intrinsic signal imaging to tomographic methods like magnetic resonance (MR) and positron emission tomography (PET); 3) to provide trainees with the knowledge necessary for research design, statistical analysis and interpretation of different types of imaging data; and 4) to prepare trainees to establish their own laboratories and independent academic research careers in neuroimaging. This program is designed to include didactic course work with hands-on experience in several laboratories, culminating in a focused research project. The emphasis of this training program is on the basic science of neuroimaging and the use of neuroimaging in the pursuit of basic neurobiological results. The development of a training program in neuroimaging is needed to address the national demand for research on mapping the brain. UCLA has the range of capabilities and depth of investigator knowledge necessary to put forth a focused program devoted to neuroimaging. The investigator has the laboratory resources, faculty interest and expertise to initiate a training program of the breadth and depth.

GRANT NUMBER: 5 T32 MH16156-19
PROJECT DIRECTOR: TOMKINS, ALAN J, PHD
ORGANIZATION: UNIVERSITY OF NEBRASKA, LINCOLN
LINCOLN, NEBRASKA
TRAINING AREA: TRAINING IN MENTAL HEALTH AND JUSTICE SYSTEMS RESEARCH
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This Training Grant will provide specialized predoctoral and postdoctoral training in mental health and justice systems research. The goal is to produce psychologists (Ph.D. MLS) and lawyer-psychologists (JD-Ph.D.) who have expertise in both legal and psychological research on issues relevant to mental health and justice systems interactions in urban and rural areas. The Training will utilize the framework of Therapeutic Jurisprudence a perspective that views the law as potentially therapeutic and champions effective service delivery when the mental health and justice systems intersect. Trainees are intended to become (a) sophisticated in the

identification and analysis of laws and policies that have implications for mental health and justice systems' interactions, and (b) skilled in conducting empirical research that examines law's assumptions, processes, and effects related to mental health issues. Graduates are trained to work in universities, in research and public interest organizations that address issues related to mental health and justice systems interactions, and in public agencies that plan, regulate, or deliver services in the context of mental health and justice systems interactions. Trainees are students in the University of Nebraska-Lincoln (UNL) Law/Psychology Program, the nation's oldest, largest, and most renowned graduate training program in psycholegal studies. Core faculty have academic appointments in the UNL Department of Psychology, College of Law, Center on Children, Families and the Law, and Department of Sociology. Faculty's expertise is diverse, covering such important areas as psychology and law, mental health law and policy, mental health and justice systems' interactions, services delivery, and Therapeutic Jurisprudence. In addition to the usual strengths and opportunities associated with academic units in psychology, law, and sociology, the Training Grant is able to draw extensively on the resources of the Center on Children, Families and the Law. Center faculty conduct contract-sponsored research and evaluations across (urban and rural) Nebraska in a variety of health, mental health, and justice systems context. Trainees' programs of studies are individually constructed; however, all trainees are required to obtain a basic background in Psychology, Law, and Psycholegal Studies (including mental health law and policy). Trainees also will be required to develop expertise in Therapeutic Jurisprudence, both as a matter of theory and in terms of its application to mental health/justice systems interactions. Trainees also participate in practica. Core faculty have strong ties to policy makers in the state, and these contacts result in unique research and training opportunities in the highest level of state government and in community agencies. In addition, this training grant includes a proposed Faculty of Experts, drawn from the nation's leading scholars in mental health and justice systems interactions, who will contribute to trainees' educational experiences.

GRANT NUMBER:	5 T32 MH19843-05
PROJECT DIRECTOR:	TOWNSEL, JAMES G, PHD
ORGANIZATION:	MEHARRY MEDICAL COLLEGE NASHVILLE, TENNESSEE
TRAINING AREA: (PREDOCTORAL)	TRAINING PROGRAM IN NEUROSCIENCE

DESCRIPTION (Adapted from applicant's abstract): This program provides training for predoctoral and postdoctoral trainees in research areas relevant to mental health. The training activities will center on studies involving neurotransmitters, signal transduction mechanism, and neuroregulation. The program consists of a predoctoral and a postdoctoral program component. The aims of the predoctoral program are: (1) to actively recruit, with an emphasis on under represented minorities, students who wish to pursue graduate studies in neuroscience; (2) to provide all first year graduate students at Meharry Medical College with an overview of the discipline, techniques, and faculty expertise available to those wishing to pursue graduate studies in neuroscience; and (3) to provide highly individualized graduate educational programs based on background, interests, and abilities. The aims of the postdoctoral program are: (1) to increase the number of biomedical scientists, again with an emphasis on under represented minorities, engaged in mental health research; and (2) to facilitate the development of independent researchers skilled in problem identification, experimental design, data interpretation and reporting, as well as grants acquisition. The success of this program will contribute to the national output of professionals trained in the area of mental health related research in general and will, in particular, contribute substantially to the output of under represented minority professionals so trained.

GRANT NUMBER: 5 T32 MH19547-07
PROJECT DIRECTOR: TROUTH, C OVID, MD, PHD
ORGANIZATION: HOWARD UNIVERSITY, SOCIETY FOR NEUROSCIENCE
WASHINGTON, DISTRICT OF COLUMBIA
TRAINING AREA: NIMH/MINORITY NEUROSCIENCE FELLOWSHIP PROGRAM
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This application requests support for a national multidisciplinary training grant administered by the SN. The long-term objective of the National Institute of Mental Health/Minority Neuroscience Fellowship Program (NIMH/MNFP) is to increase the number of underrepresented U.S. minority persons (African Americans, Hispanics, Native Americans, Alaskan Natives, and Asian/Pacific Islanders) participating in neuroscience research and teaching programs who are qualified to conduct research in the neural sciences with special emphasis on mental health and mental health disorders. Several supporting goals specify recruitment, selection, retention, training, and program management actions that will act as guidelines for ensuring achievement of the long-term objective. The applicant organization, the SN, will conduct extensive and varied outreach activities to locate, interest, contact, select, and place minorities who demonstrate high potential for becoming qualified through the NIMH/MNFP project to conduct neuroscience research and teaching related to mental health and mental health disorders. Full-time predoctoral and postdoctoral fellows will be trained in NIMH/MNFP-approved training programs located at universities throughout the United States. NIMH/MNFP-approved mentors and advisors will work with fellows to ensure that at the completion of training they will possess the technical and ethical skills to conduct and supervise independent basic and clinical neuroscience research and teaching. This will be achieved by fellows' being involved in many activities such as conducting research; receiving training in technical writing, grantsmanship/ contractmanship, and teaching; making presentations and otherwise participating in scientific conferences, seminars, and meetings; receiving instruction in the ethical conduct of research; and, completing scientific research applications such as those required for research involving human subjects and animals. A summer component of the program will train medical students who demonstrate ability and interest in the neurosciences. They will use the facilities, mentors, and other components of the program as those used to train full-time predoctoral and postdoctoral fellows.

GRANT NUMBER: 5 T34 MH16705-18
PROJECT DIRECTOR: TURKEWITZ, GERALD, PHD
ORGANIZATION: HUNTER COLLEGE
NEW YORK, NEW YORK
TRAINING AREA: HUNTER COLLEGE COR PROGRAM
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The Hunter College COR program offers minority students comprehensive research training to prepare them for research careers in mental health. The goals include the development of competence in literature research, experimental design, data acquisition, statistical data processing and the written and oral presentation of research projects. These objectives are accomplished through a combination of course work including the Hunter core curriculum and special courses developed for the COR Scholar, research placements both within and outside New York, and a colloquium series combining talks by invited speakers with intensive training in a variety of skills including computer use, writing and mathematics. Trainees are recruited before their junior year and must have an outstanding academic record, a major in Anthropology, Psychology, or Sociology, an interest in research, and a desire to pursue the Ph.D. degree in areas related to the mission of the NIMH. The curriculum includes an interdisciplinary research methods course and an intensive "mini-course" that distinguished minority scientists teach. The research faculty is not limited to Hunter College faculty. We take advantage of the resources of New York and regardless of institution, place students in the best possible settings. Students, take seminars in writing personal statements and funded by Hunter College enroll in commercial GRE preparatory courses. The COR/MARC program started at Hunter College in 1981. Substantial changes were instituted in 1985, since then

fully 80% of our COR/MARC graduates have enrolled in graduate programs at some of the best universities in the country. They have been highly successful in winning graduate fellowships and scholarships. Based on the success of our program, we are proposing only minimal changes designed to insure even more success in providing the training, necessary to help these students in the initial stages of their careers as research scientists.

GRANT NUMBER: 5 T32 MH19998-02
PROJECT DIRECTOR: VAN GORP, WILFRED G, PHD
ORGANIZATION: NEW YORK HOSPITAL – CORNELL MEDICAL CENTER
WHITE PLAINS, NEW YORK
TRAINING AREA: NEUROPSYCHOLOGY OF HIV/AIDS FELLOWSHIP
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This project will offer postdoctoral neuropsychology fellowship training with a proficiency in HIV/AIDS to new postdoctoral fellows, with each fellow completing a 2-year fellowship. Although the training program will be based at Cornell University Medical College, it will span three medical center sites: The New York Hospital/Cornell Medical Center in both New York City and White Plains, New York; Memorial Sloan-Kettering Cancer Center in Manhattan; and St. Vincent's Hospital and Medical Center, located in the Greenwich Village section of Manhattan. Fellows will be trained in child and adult clinical and research neuropsychology with a strong emphasis upon research training with HIV/AIDS. Fellows will be assigned a primary mentor/research project and a secondary project during their fellowship. Fellows' progress will be monitored by the Training Committee, which will meet monthly. To mirror the breadth of exposure to a diverse population of HIV-infected individuals in Manhattan, a diverse applicant pool is aimed for recruitment for the fellowship, including women and people of traditionally underrepresented groups.

GRANT NUMBER: 5 T32 MH19958-03
PROJECT DIRECTOR: VAUGHAN, ELAINE, PHD
ORGANIZATION: UNIVERSITY OF CALIFORNIA, IRVINE
IRVINE, CALIFORNIA
TRAINING AREA: SOCIAL AND ENVIRONMENTAL CONTEXTS OF ADAPTATION
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This training program provides interdisciplinary research training in the scientific analysis of human adaptation in various sociocultural and developmental contexts. Specifically, this program presents a structured curriculum and research opportunities for pre- and postdoctoral students in the study of response or adjustment to short- and long-term changes in the composition or structure of environments or life circumstances. Students are prepared for research careers in the behavioral sciences, particularly health psychology or human development. Trainees are exposed to courses and supervised research experiences on adaptation to: "normal" life transitions, acute changes in the social or physical environment, and shifts in societal conditions, expectations or norms. A distinguishing feature of this program is its emphasis on interdisciplinary training and the incorporation of sociocultural and other ecological factors in the study of contemporary problems of adaptation. Outstanding pre- and postdoctoral students are selected to participate in a two-year intensive program of study. Predoctoral trainees are admitted to one of two degree programs in the Department of Psychology and Social Behavior and complete a course of study leading to a Ph.D. Specialized research experiences and curriculum focus on: adaptation to social and environmental demands, adaptive functioning in developmental contexts, and adaptive functioning in diverse sociocultural contexts. Postdoctoral trainees complete coursework during the first of a two-year program extending their methodological, theoretical and statistical training to include multi-level analyses, linking macro- and individual-level phenomena, and planning and funding research on adaptation. Postdoctoral students are selected who wish to extend training in new directions, specifically in terms of

the intersection of health psychology and human development. Postdoctoral trainees gain supervised research experience by involvement in ongoing projects, and participate in a postdoctoral tutorial and seminar leading to the development and implementation of their own research proposal.

GRANT NUMBER: 5 T32 MH15737-19
PROJECT DIRECTOR: VIERCK, CHARLES J, JR, PHD
ORGANIZATION: UNIVERSITY OF FLORIDA
GAINESVILLE, FLORIDA
TRAINING AREA: RESEARCH TRAINING NEUROBIOLOGICAL SCIENCES
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This program supports training that will be administered by the Center for Neurobiological Sciences (CNS). The center coordinates, encourages and supports interdisciplinary research and education on the nervous system at the University of Florida. The training program from the National Institute of Mental Health provides predoctoral stipends to students whose advisors are members of the Center. The program that offers these stipends provides training by faculty at the University of Florida who are engaged in high quality research programs and are committed to interdisciplinary interactions in the neurobiological sciences. The program provides the students a higher degree of flexibility in designing their curricula and research experiences than is available from any single department, and the students utilize these expanded resources extensively. The program (the Center) is responsible for coordinating the predoctoral training efforts in neurobiology among a large number of departments that are represented in the newly formed University of Florida Brain Institute - a major initiative of this university. The Center offers a variety of educational programs for all students and faculty with an interest in the neurobiological sciences, extending its influence well beyond the faculty members of the Center and the students funded by the training grant. The Center sponsors a local neuroscience meeting in the fall and a regional neuroscience meeting in the spring. A number of outstanding speakers for seminars are brought in throughout the year, and travel support is provided for students and faculty to acquire new technical skills or to attend meetings and present their work. The Center supplements departmental offerings by contributing course offerings in the neurobiological sciences, and forums are provided for students to gain experience with oral and written presentations of their scientific interests. The Center does not admit students into formal degree programs; departments of the University offer these. The purpose of the Center is to enhance these departmental programs by providing broad perspectives and interdisciplinary research experiences in the neurobiological sciences.

GRANT NUMBER: 5 T32 MH15774-18
PROJECT DIRECTOR: WATERNAUX, CHRISTINE M, PHD
ORGANIZATION: COLUMBIA UNIVERSITY HEALTH SCIENCES
NEW YORK, NEW YORK
TRAINING AREA: RESEARCH TRAINING IN MENTAL HEALTH STATISTICS
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This is a request for support for Mental Health Statistics (MHS) offered by the Division of Biostatistics at Columbia University's School of Public Health. The MHS program trains statisticians completing the requirements of doctoral degrees in biostatistics (predoctoral fellows) and mental health researchers already holding a doctoral degree (postdoctoral fellows). Through these complementary programs, we aim to facilitate collaboration between statisticians and mental health researchers and to train statisticians who will specialize in psychiatric research as an area of application. Predoctoral fellows study advanced statistics in order to earn the Ph.D. or Dr.P.H. in Biostatistics, and also receive training in psychiatric nosology, psychiatric epidemiology, and psychometrics. They are expected to engage in collaborative research on mental health related projects. Postdoctoral fellows receive training in biostatistics by earning a Master's degree in biostatistics. This component of

the program is designed for psychologists, psychiatrists, sociologists or epidemiologists who have conducted research on mental health problems and who want an unusually thorough background in quantitative methods. Postdoctoral applicants with strong quantitative background (e.g., a doctorate in applied mathematics or mathematical statistics) and interest in statistical genetics are also invited to apply. These applicants may not need to work toward a biostatistics degree; instead they engage in statistical research with psychiatric applications. They learn about mental health research by taking courses in psychiatric nosology and structured assessment, by attending the weekly seminars, and by participating in mental health related research projects. Postdoctoral and predoctoral fellows interact with each other, with fellows of Columbia University's Psychiatric Epidemiology training Program, and with researchers in Columbia's Psychiatric Department and at the New York State Psychiatric Institute. The quality and breadth of the research conducted at these institutions provides a unique opportunity for MHS fellows to obtain interdisciplinary training in mental health and statistics, as well as statistical genetics.

GRANT NUMBER: 5 T32 MH15794-19
PROJECT DIRECTOR: WATSON, STANLEY J, JR, MD, PHD
ORGANIZATION: UNIVERSITY OF MICHIGAN AT ANN ARBOR
ANN ARBOR, MICHIGAN
TRAINING AREA: MENTAL HEALTH RESEARCH TRAINING
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The goal of the present application is to provide support for training postdoctoral fellows in neurobiology and biological psychiatry with particular emphasis on the biology of mood disorders. This program exists in the context of the Mental Health Research Institute (MHRI) of the University of Michigan Medical Center, and has been funded by the NIMH for over a quarter of a century. The present application represents a refocusing of the program to emphasize training in modern methods of neurobiology – including genetics, molecular biology, neuroanatomy, signal transduction, neuroendocrinology, neuroimaging - and their relevance to depression and anxiety disorders. This plan represents a continuation of our past efforts at fostering close interactions between physicians and basic scientists in arenas of relevance to understanding brain function and dysfunction. However, it has been sharpened in a number of ways to strengthen this interface and provide our trainees with a coherent and focused program: 1) Research and training efforts will be focused on a shared area between the MHRI and the Psychiatry Department - i.e., the biology of stress and mood disorders. 2) The investigator has expanded our faculty from 12 to 25 members, including a number of young, well-trained neuroscientists and biological psychiatrists. 3) Particular emphasis is placed on giving the physician trainees the opportunity to acquire both a conceptual and working knowledge of modern molecular approaches. This will be achieved through a hands-on course on molecular techniques, through laboratory exposure, and through a working seminar series focused on in-depth discussions of studies ranging from the molecule to the clinic. 4) The investigator's basic science trainees will be required to attend a course in biological psychiatry with the psychiatry residents, to get a sense of the current critical questions in this area. All trainees will hold either an M.D., a Ph.D. or both. All would be asked to select a mentor among the listed faculty and define a specific and coherent research proposal. In cases where the selected mentor is an ovum and has limited training experience, an appropriate senior co-mentor will be chosen to ensure excellent support for the trainee. This program has graduated a significant number of excellent trainees, several of them physicians, who have gone on to research careers in academic institutions. It has also trained three members of a disadvantaged minority, who have been very successful. This NIMH Training Grant will be administered by the Program Director who is the Associate Director of the MHRI and Associate Chair for Research in Psychiatry. He will be assisted by a Steering Committee, which will help in the selection of fellows, will share in the distribution of slots, and will oversee the courses relevant to this training grant, including the ethics series. The trainees will have access to world-class facilities and laboratories, in the context of a rich and supportive environment.

GRANT NUMBER: 5 T34 MH16573-20
PROJECT DIRECTOR: WEBER-LEVINE, MARGARET L, PHD
ORGANIZATION: MOREHOUSE COLLEGE
ATLANTA, GEORGIA
TRAINING AREA: ATLANTA UNIVERSITY CENTER NIMH-COR HONORS PROGRAM
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The goal of this program is to increase the number of qualified minority college graduates who are capable of competing successfully for admission to Ph.D. level programs in the biobehavioral, psychological, social and/or public health sciences. Participants will be undergraduate students who enter the training program in the summer following completion of the sophomore year. Academic and research training will be in the fields of biology, psychology, and the social sciences in areas related to mental health. Some of the subdisciplines, which will be included in the program, include neuropsychology, neuroanatomy, neurophysiology, health psychology psychopharmacology, behavior genetics, health economics, social policy, epidemiology, biostatistics and physiological psychology, again with a concentration on issues and problems in mental health. The training procedure will include formal instruction in lectures, seminars and laboratory settings. Oral and written presentations will be required in the lecture classes and some of the seminars. Research training will involve one on-campus summer experience, one off-campus summer experience, and a junior and senior year research project conducted under the guidance of a research supervisor. The senior research project will include a comprehensive oral and written report on the results of the research. Students who enter the program will have completed two full years of college work and will be majoring in the natural, psychological or social sciences. The trainees must have expressed career goals in a research area related to mental health. Additional selection criteria are: 1) The student must have a 3.0 (out of 4.0) or better GPA overall; 2) The student must have completed a minimum number of courses in their major field at the time of entry into the program; 3) The student must submit a letter of intention to pursue an advanced degree in the designated fields and; 4) The student must submit two letters of recommendation.

GRANT NUMBER: 5 T32 MH16880-18
PROJECT DIRECTOR: WEHNER, JEANNE C, PHD
ORGANIZATION: UNIVERSITY OF COLORADO AT BOULDER
BOULDER, COLORADO
TRAINING AREA: RESEARCH TRAINING--BIOLOGICAL SCIENCES
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): Over the past several years the investigators involved in the application provided a one-month enrichment experience to small groups of underrepresented minority graduate students in neuroscience, including many women, at the Marine Biological Laboratory in Woods Hole, MA. The workshops included an opportunity to attend the initial month of lectures in one of the NIH-funded courses in neuroscience; small group research seminars led by workshop faculty, visiting speakers, and members of the MBL community; discussions on issues of specific relevance to minorities and women; and explicit training in such academic survival skills as writing, oral communication, teaching, obtaining funding, seeking and retaining employment, and responsible conduct in science. This proposal seeks to (1) significantly increase the number of trainees that can participate in this series, (2) improve the quality of training program through the addition of faculty, improvement of the curriculum, and purchase of a small amount of equipment, and (3) disseminate this training more broadly.

GRANT NUMBER: 5 T32 MH19925-02
PROJECT DIRECTOR: WEINER, HERBERT, MD
ORGANIZATION: UNIVERSITY OF CALIFORNIA, LOS ANGELES
LOS ANGELES, CALIFORNIA
TRAINING AREA: POSTGRADUATE TRAINING PROGRAM IN
PSYCHONEUROIMMUNOLOGY
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The aim of this interdisciplinary, postgraduate training program in psychoneuroimmunology is to provide a comprehensive education in: 1) Those environmental factors (social, cultural physical, ethnic, economic and interpersonal), which when received as adverse, unpleasant, uncontrollable, unexpected and are (are not) coped with, perturb or influence the immune system, or one or other of its component subsystems; 2) Those psychological and neural systems (when known) that correlate with or mediate (by automatic and endocrine means) the immune perturbations; 3) Those changes in components of the immune system (e.g. cytokines, thymic hormones, hormonal products) which affect brain function and health; 5) Those psychosocial factors that may be involved in autoimmune disease, tumor progression and metastasis; and 6) Basic and clinical research in one or more of the above (1-5) topics. Particular emphasis will be placed on an in-depth research experience with an emphasis on the complex conceptual issues in this interdisciplinary area; in methodological, technical, and data analytic methods; in the problems of the choice of relevant, dependent immunological variables; and in the assessment of health outcomes. The objectives of the program will be achieved by means of research training, ongoing research, and seminar series. The trainees will be postdoctoral students (M.D.'s, Ph.D.'s, D.O.'s, D.N.Sc.'s) from various backgrounds, chosen by virtue of their past records in creative and innovative research. They are to work on their own projects under the guidance of appropriately selected preceptors with a proven record of psychoneuroimmunological research. A training program will be "tailor-made" for each trainee. Emphasis will be placed on the trainees' learning in depth the relevant techniques, experimental design, and data analysis. They will be expected to present their work at seminars. The training sites will be laboratories and clinics at UCLA and its affiliated institutions.

GRANT NUMBER: 5 T32 MH19200-10
PROJECT DIRECTOR: WEINER, HERBERT, MD
ORGANIZATION: UNIVERSITY OF CALIFORNIA, LOS ANGELES
LOS ANGELES, CALIFORNIA
TRAINING AREA: POSTDOCTORAL INTERDISCIPLINARY HIV-AIDS
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The aim of this interdisciplinary training program in HIV-infection and AIDS (or ARC) is to provide: 1) A comprehensive education of trainees in every aspect of the infection and the diseases that follow it; and 2) An in-depth basic and clinical research experience in one focused aspect of HIV-infection and AIDS. Particular emphasis will be placed on research on the epidemiological and psychosocial factors (bereavement, depression, coping strategies) and behaviors that promote and affect the course of the infection to AIDS and ARC; the role of HIV-1 on the brain in altering mood and cognition; the early recognition of encephalopathy and dementia by combined neuropsychological, EEG, imaging and CSF techniques; the neurovirology, neuroimmunology and neuropathology of CNS infection; factors affecting the passage of therapeutic agents through the blood-brain barrier; the endocrine correlates of HIV-infection and AIDS, and how these are promoted by psychological factors, influence the immune system and express CNS infection; and the role of psychological, CNS and endocrine factors in altering gastrointestinal immune processes. The objectives of the program will be achieved by the training of M.D.'s, D.O.'s and Ph.D.'s from various backgrounds to work on their own projects under the guidance of selected preceptors in basic and clinical aspects of HIV-1 infection and AIDS/ARC. In addition, an appropriate series of comprehensive and focused didactic exercises will be arranged for each trainee. Emphasis will be placed on the trainees learning in-depth the appropriate techniques, the design of

experiments and the analysis of data. The training sites will be at UCLA and its affiliated hospitals which have unique populations of high risk subjects, some not infected and some infected, and many patients with AIDS and ARC.

GRANT NUMBER: 5 T32 MH19933-05
PROJECT DIRECTOR: WEISSBERG, ROGER, PHD
ORGANIZATION: UNIVERSITY OF ILLINOIS AT CHICAGO
CHICAGO, ILLINOIS
TRAINING AREA: PREVENTION RESEARCH TRAINING: URBAN CHILDREN'S MENTAL
HEALTH
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The University of Illinois at Chicago (UIC) proposes to establish a multi-disciplinary Predoctoral and Postdoctoral Prevention Research Training Program. The program's mission is to educate prevention scientists who will conduct leading-edge preventive intervention research to promote competence and prevent mental health problems in urban children and adolescents. The multidisciplinary Training Program represents a collaborative effort of 27 faculty members from four primary UIC training units: 1) the Department of Psychology, 2) the Institute for Juvenile Research (IJR) in the Department of Psychiatry, 3) the Prevention Research Center (PRC) in the School of Public Health, and 4) the Center for Urban Educational Research and Development (CUERD) in the College of Education. Trainees will participate in prevention-related course-work, supervised research practica, and professional development experiences over a 3-year period. Predoctoral fellowships will be awarded to highly qualified graduate students enrolled UIC's predoctoral training programs in Psychology, Education, or Public Health. Postdoctoral fellowships will be awarded to promising scholars and researchers who have received an advanced degree (i.e., Ph.D., Ed.D., or M.D.) in Psychology, Public Health, Education, or Psychiatry. The program will attempt to award a minimum of 25 percent of all traineeships to minority applicants -- a realistic goal given: 1) UIC's excellent commitment and track record for recruiting outstanding minority faculty and students, and 2) the Program's emphasis on evaluating the effects of socially and developmentally appropriate interventions with culturally diverse populations. Faculty will provide multi-disciplinary training to students on prevention-related topics of problem analysis, innovation design, field trials, and innovation diffusion. More specifically, trainees will learn about: assessment and intervention approaches with at-risk, urban, economically disadvantaged, minority child and adolescent samples; designing and implementing multi-component prevention programs in a natural setting - particularly with schools, families, and communities; research designs and data-analytic techniques for longitudinal preventive interventions dimensional and categorical assessment approaches for emotional and behavioral problems and diagnosable mental disorders; risk and protective factors for emotional and behavioral dysfunction; social, cognitive, and biological influences on development; developmental epidemiological approaches; a life-span developmental and ecological theoretical orientation with sensitivity to human diversity, cost-benefit analyses of preventive interventions; strategies to disseminate effective prevention practices; and principles of scientific integrity and ethics in conducting prevention research.

GRANT NUMBER: 5 T32 MH16806-17
PROJECT DIRECTOR: WILLIAMS, DAVID R, PHD, MPH
ORGANIZATION: UNIVERSITY OF MICHIGAN AT ANN ARBOR
ANN ARBOR, MICHIGAN
TRAINING AREA: PSYCHOSOCIAL FACTORS IN MENTAL HEALTH AND ILLNESS
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This program brings together a multidisciplinary set of faculty from sociology, psychology, health behavior and health education, and biostatistics to provide research training in psychosocial factors in mental health and illness. Predoctoral and postdoctoral fellows are drawn both from the social

sciences and from epidemiology and related biomedical sciences. The training program involves three elements: (1) limited and focused academic coursework; (2) a weekly program seminar attended by all trainees and principal faculty; and (3) intensive on-the-job research experience with one or more of many ongoing studies and relevant datasets available at the Survey Research Center or the School of Public Health. Trainees continue to develop skills acquired in their own graduate programs prior to becoming part of this training program. At the same time, they acquire some exposure and competence in material from other disciplines involved in the program that are relevant to social research on mental health and illness. The goal is to foster interdisciplinary collaboration by providing a sufficiently complete body of common knowledge that a forum for common discussion exists. The program seminar, as well as several formal courses, provide settings in which students integrate their competence into a truly interdisciplinary perspective on mental health. The research placements are selected in such a way that interdisciplinary collaborations are required of each trainee. Methodologically, the program focuses on the link between survey research and experimental interventions. Substantively, the program focuses on the role of psychosocial factors in the etiology and course of mental health and illness, including the study of life events, chronic role strains, resources of adapting to potential stressors (e.g., social support, personal competence), and the actual process of coping and adaptation. Trainees who complete the program are prepared for research careers in the government, private or academic sectors.

GRANT NUMBER: 5 T32 MH19109-10
PROJECT DIRECTOR: WILLIAMS, REDFORD, MD
ORGANIZATION: DUKE UNIVERSITY
DURHAM, NORTH CAROLINA
TRAINING AREA: STRESS AND BEHAVIOR IN HEALTH AND DISEASE
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This application is for a postdoctoral training program that maintains and enhances a training environment to foster the development of the knowledge, skills, and perspectives essential to interdisciplinary research in the field of behavioral medicine. The trainees, half basic research and half clinical backgrounds, would enter the program after receiving their degree or after 1-6 years of clinical training. A two-year program is proposed. The first year's activities are organized into four areas: 1) a biweekly Behavioral Medicine Research Seminar; 2) advanced training in biostatistics and epidemiology as needed; 3) a weekly behavioral medicine journal club; and 4) acquisition of directed research experience in the preceptor's laboratory. The second year will be focussed on the completion of the trainee's own research project. Research areas available to trainees include: the neurobiology of stress in animals; human stress psychophysiology; molecular biology of stress; epidemiological studies of psychosocial factors in disease; human and animal psychoimmunology; racial factors in stress and hypertension; and behavioral and pharmacologic approaches to the prevention, treatment, and rehabilitation of stress-related medical disorders. Training faculty currently conduct behavioral medicine research on the disorders of cancer, coronary heart disease, depression, diabetes mellitus, pain syndromes, osteoarthritis, pain disorder, and depression. Disciplines included in the program are pathology, psychology (clinical, experimental, social, and biological), neurobiology, pharmacology, immunology, epidemiology, biostatistics, psychiatry, internal medicine, and cardiology. The example of senior faculty and specific encouragement of collaborative projects among trainees will foster an interdisciplinary approach to behavioral medicine. The objective is the development of behavioral medicine researchers skilled in their own specialty but able to collaborate successfully with specialists in other fields on research questions of importance to behavioral medicine.

GRANT NUMBER: 5 T32 MH18029-13
PROJECT DIRECTOR: WOLFE, BARBARA L, PHD
ORGANIZATION: UNIVERSITY OF WISCONSIN, MADISON
MADISON, WISCONSIN
TRAINING AREA: THE ECONOMICS OF MENTAL HEALTH
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): The training program proposed here will provide the resources to produce highly skilled health and mental health economists with a broad and strong foundation in mental health economics, economic theory, econometrics, and health economics. The program is based in one of the top departments of economics in the country, one with particular expertise in econometrics and policy issues related to poverty, health and mental health (particularly disability). The program includes formal coursework in economic theory and econometrics, a set of courses in a major field, a formal course in health and mental economics, a continuing weekly research seminar on mental health economics which provides trainees with the opportunity to participate in a mental health research project and supervised research under a participating faculty member. The seminar-based research program involves all steps in a project design, literature review, formulation of hypotheses, empirical estimation using large data sets, writing a paper, and formal presentation of the work.

GRANT NUMBER: 5 T32 MH15168-22
PROJECT DIRECTOR: WOOLSON, ROBERT F, PHD
ORGANIZATION: UNIVERSITY OF IOWA
IOWA CITY, IOWA
TRAINING AREA: MENTAL HEALTH EPIDEMIOLOGY AND BIOMETRY
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This is an application for a training program that has been in place at The University of Iowa since 1977. The university of Iowa/NIMH Psychiatric Epidemiology and Biometry Training Program is currently a postdoctoral program providing advanced training in psychiatric epidemiology and biostatistics to physicians and Ph.D. scientists. In its history, the program has attracted psychiatrists, biostatisticians, epidemiologists, psychologists, and health educators. The program has offered educational opportunities to two types of individuals. The first is typically an M.D. psychiatrist who has already made a commitment to a research career in psychiatry. Among these individuals are some who seek in depth training in the methods and techniques of biostatistics and epidemiology; they usually complete the M.D. degree in Community Health through this program. The second type of individual recruited for the postdoctoral program typically possess broad, or special, scientific skills but require exposure and training to the field of psychiatric epidemiology. These are ordinarily Ph.D. scientists wishing to enter the field of psychiatric epidemiology. Over the program's history, the program's strength has been its ability to recruit M.D. postdoctoral fellows. Approximately 1/2 of the fellows who have entered the program to date have been physicians. The program consists of three major activities: (1) formal coursework in biostatistics, epidemiology and psychiatric epidemiology, (2) participation in psychiatric research seminars, clinical conference activities and seminars in biostatistics and epidemiology, and (3) a precepted research experience in psychiatric epidemiology. For this competing application, it is proposed that the postdoctoral program be reduced in number of Ph.D. fellows, but keeping the M.D. component. An additional change proposed for this program is the inclusion of a predoctoral training program in biostatistics and/or epidemiology. It is expected that predoctoral fellows will require four years to complete the program while postdoctoral fellows will complete the program in either one or two years depending on background and interests. Depending on background and interest, fellows will receive didactic training in epidemiologic methods, biostatistics, psychiatric epidemiology and other courses as needed to complement their existing background. All fellows will be required to participate in courses in Responsible Conduct of Research, in the seminar programs of the Department of psychiatry, the Divisions of Epidemiology and Biostatistics and to conduct a precepted research experience. All fellows in the program engage in research projects supervised by faculty from either the Department of Preventive Medicine or Psychiatry.

GRANT NUMBER: 5 T32 MH15761-18
PROJECT DIRECTOR: WURTMAN, RICHARD J, MD
ORGANIZATION: MASSACHUSETTS INSTITUTE OF TECHNOLOGY
CAMBRIDGE, MASSACHUSETTS
TRAINING AREA: NEURAL AND ENDOCRINE REGULATION OF BRAIN AND BEHAVIOR
(PREDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This institutional training program supports select students enrolled in a multidisciplinary predoctoral training program on neural and endocrine regulation of brain and behavior administered by the Massachusetts Institute of Technology's (MIT) Department of Brain and Cognitive Sciences. The program trains students to conduct research in neuroscience and behavior, specifically focusing on the effects of circulating chemicals (e.g., nutrients, drugs, hormones, and toxins) on neurotransmitters and other brain constituents that underlie particular behaviors. The program has graduated 22 doctorates since the last application. Nine of these trainees received support from this grant. The program is requesting continued support of predoctoral and postdoctoral trainees, the latter intended for physicians interested in clinical neuropsychopharmacology. Trainees take courses that satisfy departmental requirements for a major in Neuroscience and a minor in Neurobiology. In addition, they are required to take courses in animal behavior, advanced neurotransmitter, biochemistry, and endocrinology or nutrition or general pharmacology. They are also encouraged to learn about normal and pathological human behaviors by taking appropriate courses or seminars and by participating in research at MIT's Clinical Research Center. Trainees will, in general, have strong backgrounds in the natural sciences (e.g., undergraduate majors in biology, chemistry, physics or electrical engineering). Occasional trainees will already hold a graduate degree in other fields such as medicine. Candidates for appointments to one of the funded slots will be chosen by the faculty committee constituted for the purpose of overseeing this program, and will be evaluated on the basis of interviews, talent for research as demonstrated by past performance, letters of recommendation, grades, and GRE scores. Training will be carried out primarily at MIT's Whitaker College building (E25). Other facilities are located in the former Psychology building (E10), the Clinical Research Center (E17), and the buildings (16 and 56) which house MIT's Biology Department.

GRANT NUMBER: 5 T32 MH18905-11
PROJECT DIRECTOR: YESAVAGE, JEROME A, PHD
ORGANIZATION: STANFORD UNIVERSITY
STANFORD, CALIFORNIA
TRAINING AREA: FELLOWSHIP IN MENTAL HEALTH AND THE AGED AND DEMENTIAS
(POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This is an application for research training fellowships in mental health and the aged and dementias. The current research training grant was funded to act in parallel with the Clinical Research Center. This Center is committed to the in-depth study of Alzheimer's Disease (AD). Over 200 patients have been followed longitudinally for up to a decade. Research training has been provided to M.D. and Ph.D. postdoctoral scholars with the goal of introducing them to current research methodology in the study of dementing illnesses. The applicant indicates that collaboration is rich, involving a number of well-established laboratories at Stanford. Topics of study have ranged from clinical issues, to biochemistry, to brain imaging. The current program direction will be to continue with a preceptorship model in which trainees closely work with a chosen mentor in their research area. The applicant emphasizes that his Department now has a new chair, Alan Schatzberg, M.D., who strongly supports training efforts. Dr. Schatzberg's interdisciplinary model for the overall organization of the Department closely parallels the organization for the Center, where several laboratories proficient in certain research methodologies apply their techniques to a certain mental illness. It is expected that trainees will be affiliated with one of the major laboratories so that they can learn that laboratory's special research methodology, and learn how to apply that

methodology to AD research. There are several new aspects to this renewal application. First, the program will include collaboration with the Stanford University Center for Biomedical Ethics to develop a required eight-week course on scientific ethics. Second, a new Research Recruitment Component will be seen as an entry level conduit for primarily psychiatry residents considering a research career in geriatric psychiatry. Third, a new major aspect of the Research Recruitment Program will be specific methods for recruiting individuals from underrepresented and minority groups.

GRANT NUMBER: 2 T32 MH18904-11
PROJECT DIRECTOR: ZARIT, STEVEN H, PHD
ORGANIZATION: PENNSYLVANIA STATE UNIVERSITY, UNIVERSITY PARK
UNIVERSITY PARK, PENNSYLVANIA
TRAINING AREA: TRAINING IN RESEARCH ON MENTAL HEALTH AND AGING
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): A research training program is proposed which emphasizes the application of interdisciplinary training in developmental processes to specific questions in the mental health of the aging. Training will emphasize 4 substantive areas and 3 cross-cutting themes. The substantive areas are: (1) assessment; (2) family mental health; (3) intervention research; and (4) behavioral genetics. Cross-cutting themes are: (1) methodology of mental health research and the study of change; (2) cultural diversity; and (3) responsible conduct of research. Both predoctoral and postdoctoral positions are requested. At the predoctoral level, trainees will develop substantive interests through a combination of appropriate course work, apprenticeship research training, and other experiences, leading to completion of their doctorate. Postdoctoral training will be carried out through an apprenticeship with training faculty, during which trainees will undertake significant research projects within one or more of the substantive areas of this program. They will also take courses as appropriate to fill gaps in their prior training and participate in other training experiences such as workshops, conferences, and research colloquia. Faculty with established research programs and expertise in the substantive areas of this program will serve as mentors to trainees, assuring a high quality of research training on problems of mental health and aging.

GRANT NUMBER: 5 T32 MH18273-14
PROJECT DIRECTOR: ZIGMOND, MICHAEL J, PHD
ORGANIZATION: UNIVERSITY OF PITTSBURGH AT PITTSBURGH
PITTSBURGH, PENNSYLVANIA
TRAINING AREA: TRAINING IN THE NEUROBIOLOGY OF PSYCHIATRIC DISORDERS
(PREDOCTORAL/POSTDOCTORAL)

DESCRIPTION (Adapted from applicant's abstract): This is a training program focused on basic neurobiological studies of relevance to mental health, with a particular focus on issues of cell-cell communication. This program builds on a larger training program in neuroscience and on three major groups: (1) stress and monoamines (supported by MH29670), (2) the Center for Neuroscience of Mental Disorders (supported by MH45156), and (3) the neuroendocrine interest group with its affiliated Center for Research in Reproductive Physiology and Primate Center and a grant to support the Primate Center (supported by HD08610 and several R01 grants). These training and research programs have helped to develop and integrate diverse elements of the basic neuroscience community at the University of Pittsburgh and to strengthen its ties to clinical neuroscience. We wish to further develop our training in neuroscience by building on these accomplishments while adapting to the current needs of our community. In particular we wish to develop a training program that consolidates several groups of faculty with a primary interest in neurodegenerative disease. Predoctoral students take a series of core courses in neuroscience and other areas of basic biological science, a seminar on professional skills, and other advanced seminars. Postdoctoral trainees attend the professional skills seminar and other courses and seminars as needed. The majority of faculty mentors will be in the Department of Neuroscience in the Faculty of Arts and Sciences. Other participating departments and centers include

the Center of Neuroscience, the Alzheimer's Disease Research Center, and the Departments of Biological Sciences, Neurobiology, Cell Science and Physiology, Neurology, and Pathology.